Yahoo Group Archive: regenrx (2016 — 2017)

Yahoo Group summary: Regenerative Receiver Group

These Yahoo Groups messages were archived in WARC format by ArchiveTeam in 2017. This PDF was generated by Digital Library of Amateur Radio & Communications from the WARC files in 2026.

Date span: 2016-01-01 through 2017-07-11

Source WARC: regenrx.69YPphO.warc.gz

Source item: https://archive.org/details/yahoo-groups-2017-07-19T14-12-37Z-92d1f4

Messages included in this PDF: 2668

Message records with no body available in the source archive: 5

Messages omitted as spam from this PDF: 124

Yahoo replaced the domain portions of email addresses with @... in the archived messages. Characters lost in Yahoo's archived text appear as ?.

Messages are presented in ascending Yahoo message-ID order. Gaps indicate records absent from the source WARC or messages omitted from this PDF as spam.

25539. Re: Band Switching Regen for 40/80

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-01 13:09:21 UTC
From: johnhutnick@...
Topic: 25513 Message: 25539

Maybe I missed it somewhere else, but the schematic does not seem to list the values for the variable capacitors, nor are the coils specified as to gauge, turns, dia.
Happy New Year to all.

25540. Re: suggestions wanted on building a 3 or 4 tube single signal regen receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-01 13:49:06 UTC
From: b_weeber@...
Topic: 25504 Message: 25540

Hello Stan

If you think about a battery powered receiver, you would probably like the circuit diagram on Bob Weaver's website. Have a look on the last circuit diagram three quarters down:
Three Tube Superheterodyne Receiver Part 1
http://electronbunker.ca/eb/ThreeTubeSuper1.html

http://electronbunker.ca/eb/ThreeTubeSuper1.html

Three Tube Superheterodyne Receiver Part 1
http://electronbunker.ca/eb/ThreeTubeSuper1.html A couple of years ago, I acquired a collection of vintage 1930s era vacuum tubes which were designed to be operated from a battery supply. Some had 1.4 volt...

View on electronbunker.ca http://electronbunker.ca/eb/ThreeTubeSuper1.html
Preview by Yahoo

The three tubes could be replaced by miniature types like:
V1: 1R5, 1AC6 or 1AB6
V2: 1T4, 1L4 or 1AJ4
V3: 1S4, 3S4, 3V4, 3Q4 or 3C4

So turn your parts box upside down and check, if you find something useful.

best regards,
Bernd

25541. RE: [regenrx] Re: Regenerative superhets?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-01 14:57:46 UTC
From: weak_signals@...
Topic: 25465 Message: 25541

Hi Don
I tried to phone you over the last couple of weeks. I keep bumping into your posts/website/emails as I have been juiced about regens lately. I live 20 km south of Peterborough, and am delighted that you are in the RF nieghborhood. I have found that my ultrasonic parts cleaner did a great job on a scuzzy var-cap/ Peter VE3GYY

---In regenrx@yahoogroups.com, <dulmagedon@...> wrote :

I built the regen from the 1943 handbook but did it breadboard and on the other half of the breadboard (I cut it in two) I built the 6l6 breadboard transmitter. Very happy with both. They work very well. I also have started the Simple superhet three tube project from the ARRL book but updated the tube choice to minature tubes. On the regen mentioned at the top I subbed a 6sl7 for the original tube because I had several of them. Here it is just before I finished the receiver and put them both on the air. I was using them again today and I still enjoy this vintage station a lot. I use a Nostalgia 60 watt light bulb over the operating table to help make the mood period correct.
donVe3LYX

25542. RE: [regenrx] Re: Regenerative superhets?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-01 15:27:25 UTC
From: dulmagedon@...
Topic: 25465 Message: 25542

Hi Peter! Well you are not very far away! I have friends in Keene (Vilneff Auto Repair) and Hastings (Larry the bricklayer) as well as family in Peterborough by same last name. I am home today all day. But email also works as does Ham radio. I am good AM (40M and 80M) or (SSB 80M 40m 20m) and of course CW. I have been testing a mag loop antenna on 7290khz this morning using my Hb AM transceiver. Its Receiver is basically the powerhouse regen from the 1970s with mods to suit me. Last evening I was on 80m with my 6l6 transmitter (3542 crystal) and my 6sl7 regen as in the breadboard photos.
Hope to hear from you!
DonVe3LYX

25543. Re: [regenrx] Re: Band Switching Regen for 40/80

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-01 17:33:39 UTC
From: Leonard Meek
Topic: 25513 Message: 25543

I'm not as particular about component values as others, especially with tuning circuits and power supplies. I use whatever I have on hand and try to adapt the rest of the circuit. That may be why success is so illusive, but I can't see specifying components and values that are unobtainable. Coils are fitted to whatever band I want by resonating them with a known capacitor (with a scope & sig gen) and using the resultant frequency to calculate the inductance of the coil. The physical dimensions and wire of the coil are relatively unimportant. Physical layout of the chassis seems to have more effect on performance. I build my sets just for the fun of making something work. I don't expect Collins performance with a handful of tubes & components, and a skimpy electronics education. Failure has been good to me.

Leonard

----- Original Message -----
From: johnhutnick@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Friday, January 01, 2016 3:09 AM
Subject: [regenrx] Re: Band Switching Regen for 40/80

Maybe I missed it somewhere else, but the schematic does not seem to list the values for the variable capacitors, nor are the coils specified as to gauge, turns, dia.

Happy New Year to all.

25544. Re: [regenrx] Re: Band Switching Regen for 40/80

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-02 01:04:35 UTC
From: Rob
Topic: 25513 Message: 25544

Its really nice to examine details in your projects.... especially after researching the old sources .....
and the majority of the parts are obtainable.... some more elusive.

when you say:
Coils are fitted to whatever band I want by resonating them with a known capacitor (with a scope & sig gen) and using the resultant frequency to calculate the inductance of the coil.

Is there any great web description of that design process?... for a neophyte like me.

On 01/01/2016 12:33 PM, 'Leonard Meek' lemeek@... [regenrx]
wrote:
>
> □
>
> I'm not as particular about component values as others, especially
> with tuning circuits and power supplies. I use whatever I have on hand
> and try to adapt the rest of the circuit. That may be why success is
> so illusive, but I can't see specifying components and values that are
> unobtainable. Coils are fitted to whatever band I want by resonating
> them with a known capacitor (with a scope & sig gen) and using the
> resultant frequency to calculate the inductance of the coil. The
> physical dimensions and wire of the coil are relatively unimportant.
> Physical layout of the chassis seems to have more effect on
> performance. I build my sets just for the fun of making something
> work. I don't expect Collins performance with a handful of tubes &
> components, and a skimpy electronics education. Failure has been good
> to me.
> Leonard
> ----- Original Message -----
>
> *From:* johnhutnick@... [regenrx]
> <mailto:johnhutnick@...%20[regenrx]>
> *To:* regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>
> *Sent:* Friday, January 01, 2016 3:09 AM
> *Subject:* [regenrx] Re: Band Switching Regen for 40/80
>
> Maybe I missed it somewhere else, but the schematic does not seem
> to list the values for the variable capacitors, nor are the coils
> specified as to gauge, turns, dia.
>
> Happy New Year to all.
>

>

25545. Re: [regenrx] Re: Band Switching Regen for 40/80

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-02 01:50:44 UTC
From: Leonard Meek
Topic: 25513 Message: 25545
Attachments: 1 described; binary payloads are missing from this source WARC

Rob, There is a site somewhere that shows the process but I can't think of it right now. However, the method I use is shown here.

Adjust the sig gen frequency for max indication, then calculate the inductance, ie;

L=1/(((6.28*freq)^2)*Cap)

I entered the equation into a spreadsheet to do the calculation.

----- Original Message -----
From: Rob roomberg@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Friday, January 01, 2016 3:04 PM
Subject: Re: [regenrx] Re: Band Switching Regen for 40/80

Its really nice to examine details in your projects.... especially after researching the old sources .....
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Is there any great web description of that design process?... for a neophyte like me.

On 01/01/2016 12:33 PM, 'Leonard Meek' lemeek@... [regenrx] wrote:

☐

I'm not as particular about component values as others, especially with tuning circuits and power supplies. I use whatever I have on hand and try to adapt the rest of the circuit. That may be why success is so illusive, but I can't see specifying components and values that are unobtainable. Coils are fitted to whatever band I want by resonating them with a known capacitor (with a scope & sig gen) and using the resultant frequency to calculate the inductance of the coil. The physical dimensions and wire of the coil are relatively unimportant. Physical layout of the chassis seems to have more effect on performance. I build my sets just for the fun of making something work. I don't expect Collins performance with a handful of tubes & components, and a skimpy electronics education. Failure has been good to me.

Leonard

----- Original Message -----
From: johnhutnick@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Friday, January 01, 2016 3:09 AM
Subject: [regenrx] Re: Band Switching Regen for 40/80

Maybe I missed it somewhere else, but the schematic does not seem to list the values for the variable capacitors, nor are the coils specified as to gauge, turns, dia.

Happy New Year to all.

25546. Re: [regenrx] Re: Band Switching Regen for 40/80

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-02 01:57:54 UTC
From: Bill Cromwell
Topic: 25513 Message: 25546

Hi Rob,

If you don't a have a scope that covers the expected frequency range you can use an RF probe (an AM detector) into a VTVM, FETVM, or - less desirable - a DVM (part of a DMM - digital multimeter). The motion of the needle in the VTVM or FETVM is a valuable part of the "user interface" in that role.

Just sweep the signal generator through the frequency range connected across (or through) the resonant circuit and find the frequency where it peaks (or dips). The specified voltmeters will show you. In this case, if you are using a scope it is serving as a voltmeter and is just as nice as the Voltmeters.

That's about as clear as I can make it. The principles are covered in *all* of the radio handbooks.

73,

Bill KU8H

On 01/01/2016 08:04 PM, Rob roomberg@... [regenrx] wrote:
>
> Its really nice to examine details in your projects.... especially
> after researching the old sources .....
> and the majority of the parts are obtainable.... some more elusive.
>
> when you say:
> Coils are fitted to whatever band I want by resonating them with a
> known capacitor (with a scope & sig gen) and using the resultant
> frequency to calculate the inductance of the coil.
>
> Is there any great web description of that design process?... for a
> neophyte like me.
>
>
>
>

25547. Re: [regenrx] Re: Band Switching Regen for 40/80

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-02 02:02:10 UTC
From: Bill Cromwell
Topic: 25513 Message: 25547

Leonard!

For shame. I am so disappointed in you. A spreadsheet? Really? What's wrong with a pencil and brown paper bag?

Oh wait.. the brown paper bags are becoming unobtanium <evil grin>

I wonder how closely my description matches the nice picture you furnished.

73,

Bill KU8H

On 01/01/2016 08:50 PM, 'Leonard Meek' lemeek@... [regenrx] wrote:
>
> □
>
> Rob, There is a site somewhere that shows the process but I can't
> think of it right now. However, the method I use is shown here.
> ---snip------
>
> Adjust the sig gen frequency for max indication, then calculate
> the inductance, ie;
> L=1/(((6.28*freq)^2)*Cap)
> I entered the equation into a spreadsheet to do the calculation.
>

25548. Re: [regenrx] Re: Band Switching Regen for 40/80

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-02 04:08:23 UTC
From: Leonard Meek
Topic: 25513 Message: 25548

Bill, I think you're dead on. My command of English is not great, and even worse with any other language. I should mention that the two 2pF caps are there to keep the capacitance of the cables and test equipment from adding to the resonant circuit. they give a sharper indication on the scope/VTVM and reduce the posibility of "second dipping." I'm not a computer geek but occassionally I find something I can do on them that saves me a lot of tedious scribbling.

Leonard

----- Original Message -----
From: "Bill Cromwell wrcromwell@... [regenrx]"
<regenrx@yahoogroups.com>
To: <regenrx@yahoogroups.com>
Sent: Friday, January 01, 2016 4:02 PM
Subject: Re: [regenrx] Re: Band Switching Regen for 40/80

> Leonard!
>
> For shame. I am so disappointed in you. A spreadsheet? Really? What's
> wrong with a pencil and brown paper bag?
>
> Oh wait.. the brown paper bags are becoming unobtanium <evil grin>
>
> I wonder how closely my description matches the nice picture you
> furnished.
>
> 73,
>
> Bill KU8H
>
> On 01/01/2016 08:50 PM, 'Leonard Meek' lemeek@... [regenrx]
> wrote:
>>
>> □
>>
>> Rob, There is a site somewhere that shows the process but I can't
>> think of it right now. However, the method I use is shown here.
>> ---snip------
>>
>> Adjust the sig gen frequency for max indication, then calculate
>> the inductance, ie;
>> L=1/(((6.28*freq)^2)*Cap)
>> I entered the equation into a spreadsheet to do the calculation.
>>

>
>
>
> ---
> Posted by: Bill Cromwell <wrcromwell@...>
> ---
>
> "In the interest of Regenerating radio's lost art of Regeneration"
> ---
>
> Yahoo Groups Links
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>
>

25549. Re: [regenrx] Re: Band Switching Regen for 40/80

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-02 11:53:41 UTC
From: Bill Cromwell
Topic: 25513 Message: 25549

Hi Rob,

Leonard and I both sent you information that essentially agrees and addresses your question. Leonard's comments triggered memory of another, related approach. The use of a grid-dip meter (or gate-dip meter). Google should be your friend.

The question now is whether our replies were of any help to you. So Rob..did you get the information you needed?

73,

Bill KU8H

On 01/01/2016 08:04 PM, Rob roomberg@... [regenrx] wrote:
>
> Its really nice to examine details in your projects.... especially
> after researching the old sources .....
> and the majority of the parts are obtainable.... some more elusive.
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> known capacitor (with a scope & sig gen) and using the resultant
> frequency to calculate the inductance of the coil.
>
> Is there any great web description of that design process?... for a
> neophyte like me.
>
>

25550. Finding resonant frequency of a L/C circuit

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-02 16:33:21 UTC
From: willard561@...
Topic: 25550 Message: 25550

I think a lot of you are missing a easy way of finding the resonant frequency of a L/C circuit, that is to use a Grid Dip/Fet dip meter. They're an easy project to build and very useful.
Bill Higdon

25551. Re: [regenrx] Finding resonant frequency of a L/C circuit

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-02 17:32:05 UTC
From: Leonard Meek
Topic: 25550 Message: 25551

I have a GDO and an FETDO that I use for quick checks, but neither is as sensative as the SG/Scope method. Also, neither of my dippers go much below 2MHz. I alway have a counter on the sig gen because I don't trust the acuracy of its dial. My inductance meter doesn't read reliably below 1mH and is more useful for power supply chokes..All of my test equipment is marginal at best.

Leonard

----- Original Message -----
From: willard561@...m [regenrx]
To: regenrx@yahoogroups.com
Sent: Saturday, January 02, 2016 6:33 AM
Subject: [regenrx] Finding resonant frequency of a L/C circuit

I think a lot of you are missing a easy way of finding the resonant frequency of a L/C circuit, that is to use a Grid Dip/Fet dip meter. They're an easy project to build and very useful.
Bill Higdon

25552. Re: [regenrx] Re: Band Switching Regen for 40/80 ANSWERS YES DEFINITELY

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-02 20:42:55 UTC
From: Rob
Topic: 25513 Message: 25552

YES
DEFINITELY YES

THANK YOU!!!!!!!!!
I just have no wires to play with now..... xmass ..... XYL...
travel..... grandchildren

MERRY CHRISTMAS and HAPPY NEW YEAR to EVERYONE

On 01/02/2016 06:53 AM, Bill Cromwell wrcromwell@... [regenrx] wrote:
>
> Hi Rob,
>
> Leonard and I both sent you information that essentially agrees and
> addresses your question. Leonard's comments triggered memory of another,
> related approach. The use of a grid-dip meter (or gate-dip meter).
> Google should be your friend.
>
> The question now is whether our replies were of any help to you. So
> Rob..did you get the information you needed?
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> 73,
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> Bill KU8H
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> On 01/01/2016 08:04 PM, Rob roomberg@... [regenrx] wrote:
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> > Coils are fitted to whatever band I want by resonating them with a
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> > frequency to calculate the inductance of the coil.
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> > Is there any great web description of that design process?... for a
> > neophyte like me.
> >
> >
>
>

25553. Re: [regenrx] Re: Band Switching Regen for 40/80 the MATH

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-03 01:07:12 UTC
From: Rob
Topic: 25513 Message: 25553
Attachments: 1 described; binary payloads are missing from this source WARC

I put the test circuit image here for discussion:
http://www.learnmorsecode.com/help/regen/resonantcircuit.jpg
if the attachment image was lost.

So lets say I wanted to make a tank circuit for AM radio reception...
540Kc to 1600kHZ.....
and just for giggles lets pick 1,000kHz to plug into the formula.
Keeping in mind that I'm not looking for the whole band now... I am just
proofing the math
and revisiting algebra.

the formula in the image is:
L=1/(((6.28*freq)^2)*Cap)

I'm going to assume that 6.28 was Pi times 2.

Using the 100pF capacitor ... I think that I'm supposed to
use .000000001 for Cap.
that is point then 8 zeros in front of the ONE.

For the frequency of 1,000kHz.... that is actually 1,000,000 Hz.

So the formula with fat numbers looks more like
L=1/(((6.28*1,000,000)^2)*.000000001)

so first thing is to multiply 6.28 times 1,000,000 which equals 6,280,000
and then it shows ^2 which really means 6,280,000 squared... equals:
3.94384x10-13

then multiply by .000000001 equals 39,438.4
and then the final step 1 divided by that 39,438.4
equals .000025355

Did I get that right?
and what is that .... micro henries?
is that a 2.5 microhenries....
or is that 25 milihenries?

I have more questions but I'll wait until anyone confirms I got the math
right
and can tell me what unit the result is in.

On 01/01/2016 08:57 PM, Bill Cromwell wrcromwell@... [regenrx] wrote:
> ust sweep the signal generator through the frequency range connected
> across (or through) the resonant circuit and find the frequency where it
> peaks (or dips). The specified voltmeters will show you. In this case,
> if you are using a scope it is serving as a voltmeter and is just as

> nice as the Voltmeters.

25554. Re: [regenrx] Re: Band Switching Regen for 40/80 the MATH [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-03 02:04:40 UTC
From: Leonard Meek
Topic: 25554 Message: 25554

The numbers are right but I think the cap should be .0000000001.(9 "0's before the 1) That would come out .00025355, or 253 uH (microhenries)

Leonard

----- Original Message -----
From: "Rob roomberg@... [regenrx]" <regenrx@yahoogroups.com>
To: <regenrx@yahoogroups.com>
Sent: Saturday, January 02, 2016 3:07 PM
Subject: Re: [regenrx] Re: Band Switching Regen for 40/80 the MATH [1 Attachment]

>I put the test circuit image here for discussion:
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> L=1/(((6.28*1,000,000)^2)*.000000001)
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> and then it shows ^2 which really means 6,280,000 squared... equals:
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> Posted by: Rob <roomberg@...>
> ------------------------------------
>
> "In the interest of Regenerating radio's lost art of Regeneration"
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25555. Re: [regenrx] Re: Band Switching Regen for 40/80 the MATH [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-03 02:58:08 UTC
From: Rob
Topic: 25513 Message: 25555

oops..... 9 zeros... not 8 zeros....
sorry.... I have a vision problem......
result is .000253 or 253 uH (microhenries)

OOOKKKKKKkkkkkkkkk.....

so lets say I wind a coil and it measures 253uH on my Proskit LCR Meter MT-5210 inductance meter.....
at that point I am assuming I have the correct inductance to make a resonant tank circuit for radio reception of 1Mhz.

So for 40 meter CW reception on 7.110 Mhz (its a PIXIE freq for newbies) ..... I get L=.00000501.... or 5 uH

Is that all there is to it?.... use a 5uH coil with a 100pF cap and expect to hear 7.110 on the J310-2N3904 circuit?

I made a variable inductor a while ago:
http://www.learnmorsecode.com/help/rfcoilandferrite.html

=======!=====!======!======!=======!==========
The numbers are right but I think the cap should be .0000000001.(9 "0's before the 1) That would come out .00025355, or 253 uH (microhenries)
Leonard
========!!
On 01/02/2016 08:07 PM, Rob roomberg@... [regenrx] wrote:
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> and just for giggles lets pick 1,000kHz to plug into the formula.
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> wrote:
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> > if you are using a scope it is serving as a voltmeter and is just as
> > nice as the Voltmeters.
>
>

25556. Re: [regenrx] Re: Band Switching Regen for 40/80 the MATH found the Exp button

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-03 04:44:17 UTC
From: Rob
Topic: 25513 Message: 25556

I'm using an $11 SHARP EL-531X calculator... with a magnifying
glass...damn small print on the buttons.....
finding too many zeros like 9 leading zeros ends that game real quick.....
resorted to learning about the Exp key......
entering frequency of 1Mhz as 1 EXP 6
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and then multiply the final answer by 1 EXP 6
to get those 253 and 5 microhenries.

As a retired computer programmer I must say I never once pushed an EXP
button in 20 years
for anything.
But this EXP definitely makes very short work of this formula.

On 01/02/2016 09:58 PM, Rob roomberg@... [regenrx] wrote:
>
> oops..... 9 zeros... not 8 zeros....
> sorry.... I have a vision problem......
> result is .000253 or 253 uH (microhenries)
>
> OOOKKKKKKkkkkkkkkk.....
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> so lets say I wind a coil and it measures 253uH on my Proskit LCR
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> at that point I am assuming I have the correct inductance to make a
> resonant tank circuit for radio reception of 1Mhz.
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> newbies) ..... I get L=.00000501.... or 5 uH
>
> Is that all there is to it?.... use a 5uH coil with a 100pF cap and
> expect to hear 7.110 on the J310-2N3904 circuit?
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> I made a variable inductor a while ago:
> http://www.learnmorsecode.com/help/rfcoilandferrite.html
>
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> The numbers are right but I think the cap should be .0000000001.(9 "0's
> before the 1) That would come out .00025355, or 253 uH (microhenries)
> Leonard
> ========!!
>
> On 01/02/2016 08:07 PM, Rob roomberg@... [regenrx] wrote:

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>> I put the test circuit image here for discussion:
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>> So lets say I wanted to make a tank circuit for AM radio reception...
>> 540Kc to 1600kHZ.....
>> and just for giggles lets pick 1,000kHz to plug into the formula.
>> Keeping in mind that I'm not looking for the whole band now... I am just
>> proofing the math
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>> the formula in the image is:
>> L=1/(((6.28*freq)^2)*Cap)
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>> I'm going to assume that 6.28 was Pi times 2.
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>> use .000000001 for Cap.
>> that is point then 8 zeros in front of the ONE.
>>
>> For the frequency of 1,000kHz.... that is actually 1,000,000 Hz.
>>
>> So the formula with fat numbers looks more like
>> L=1/(((6.28*1,000,000)^2)*.000000001)
>>
>> so first thing is to multiply 6.28 times 1,000,000 which equals 6,280,000
>> and then it shows ^2 which really means 6,280,000 squared... equals:
>> 3.94384x10-13
>>
>> then multiply by .000000001 equals 39,438.4
>> and then the final step 1 divided by that 39,438.4
>> equals .000025355
>>
>> Did I get that right?
>> and what is that .... micro henries?
>> is that a 2.5 microhenries....
>> or is that 25 milihenries?
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>> I have more questions but I'll wait until anyone confirms I got the math
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>> > if you are using a scope it is serving as a voltmeter and is just as

>> > nice as the Voltmeters.
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>
>

25557. Re: [regenrx] Re: Band Switching Regen for 40/80 the MATH

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-03 05:01:14 UTC
From: Leonard Meek
Topic: 25513 Message: 25557

You got it, except stray wire capacitance will skew your results slightly. It's always best the have a way to vary the cap or inductance.

Leonard

----- Original Message -----
From: Rob roomberg@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Saturday, January 02, 2016 4:58 PM
Subject: Re: [regenrx] Re: Band Switching Regen for 40/80 the MATH

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sorry.... I have a vision problem......
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and what is that .... micro henries?
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25558. Re: [regenrx] Re: Band Switching Regen for 40/80 the MATH found the Exp button

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-03 05:09:50 UTC
From: Leonard Meek
Topic: 25558 Message: 25558

Don't feel all alone, Rob. I've been on my second retirement for the last 8 yrs and I'm starting to forget my math. I frequently have to redevelop my equations before I can use them. That's why I started putting the formulas in my spreadsheet to reduce the errors I was getting with misplaced decimal pts, etc.

Leonard

----- Original Message -----
From: Rob roomberg@ptd.net [regenrx]
To: regenrx@yahoogroups.com
Sent: Saturday, January 02, 2016 6:44 PM
Subject: Re: [regenrx] Re: Band Switching Regen for 40/80 the MATH found the Exp button

I'm using an $11 SHARP EL-531X calculator... with a magnifying glass...damn small print on the buttons.....
finding too many zeros like 9 leading zeros ends that game real quick.....
resorted to learning about the Exp key......
entering frequency of 1Mhz as 1 EXP 6
and capacitance off 100pF as 1 EXP -10
and then multiply the final answer by 1 EXP 6
to get those 253 and 5 microhenries.

As a retired computer programmer I must say I never once pushed an EXP button in 20 years for anything.
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> nice as the Voltmeters.

25559. Tank Circuit Calculations - L, C & F

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-03 07:15:35 UTC
From: les.au49@...
Topic: 25559 Message: 25559

G'day all:

The ARRL handbook from "those days" gave a short formula relating inductance (microhenries), capacitance (pico-Farad) and Frequency (MHz).

L * C equals 25330.29/(F * F)

Example #1. If you want to build a circuit that tunes 3.56 MHz then the product of LC must be 25330.29/(3.56 * 3.56) = 1998.66

This is more accurate than YOU need, but you can check the accuracy of your calculation from the example. If you have a 20uH coil, your capacitor must be 99.9pF.

Example #2. Suppose you have a "precision" capacitor, 100pF in value. Your "prize" coil, wound on a ceramic former (and very nice) resonates at 3.60MHz. What is the value of this "nice" coil?
Answer: L equals 25330.3/(3.60 * 3.60 * 100) = 19.54 micro-Henries

Example #3. Known "L", unknown "C".
The coil and capacitor resonate at 2.1MHz
The coil inductance is 9.5uH
What value is the capacitor.
C equals 25330.3/(Freq * Freq * L) = 25330.3/(2.1 * 2.1 * 9.5) = 604pF

Example #4. I have a 15uH coil and a 150pF capacitor.
What is the resonant frequency of the tank circuit?

Freq equals sqrt (25330.3/LC) = sqrt(25330.3/(15*150)MHz = sqrt(11.26) = 3.355MHz

Some words of explanation:
A "tank" circuit is a parallel combination of coil and capacitor - as you see connected to the grid of many regen detectors.
I understand it is called a "tank" circuit because the electricity "sloshes" up an down in the capacitor in the same way water will slosh around when a water "tank" is disturbed. (If you have a better understanding of why the word "tank" is used, I'll be pleased to hear it!

The "magic" number 25330.29 is simply 1,000,000/(4 * pi * pi). Try it!
The "long" formual is LC = 1,000,000/(4 * pi * pi * freq * freq), but 25330.29/(F*F) is more convenient, c'est nes pas?

I started a new thread, with a new topic, because the previous thread (now discussing L,C and Frequency) started with a completely different subject. Now the subject heading and the content match again.

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73 to all in 2016

Les

25560. Re: [regenrx] Tank Circuit Calculations - L, C & F

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-03 07:57:40 UTC
From: Bill Houghton
Topic: 25559 Message: 25560

I suspect its called a tank circuit because the energy is stored. In capacitors energy is stored in an electric field. In inductors energy is stored in a magnetic field. At one point all of the energy will be stored in the capacitor's electric field. As the capacitor discharges the energy stored in its electric field will be stored in the inductor's magnetic field. At another point in time all of the energy will be stored in the inductor's magnetic field. As the magnetic field collapses, it's energy will be stored in the capacitor's electric field. This results in a recirculating current in the tank circuit. If there were no system losses, the current in the tank circuit would continue forever.
Where do those formulas come from? The come from the idea that at the frequency of resonance, the inductive and capacitance reactances are equal, and thus,
2 pi fL = 1/(2 pi fC)
73,
Bill, WA6NEQ

From: "les.au49@... [regenrx]" <regenrx@yahoogroups.com>
To: regenrx@yahoogroups.com
Sent: Saturday, January 2, 2016 11:15 PM
Subject: [regenrx] Tank Circuit Calculations - L, C & F

G'day all:

The ARRL handbook from "those days" gave a short formula relating inductance (microhenries), capacitance (pico-Farad) and Frequency (MHz).

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Example #2. Suppose you have a "precision" capacitor, 100pF in value. Your "prize" coil, wound on a ceramic former (and very nice) resonates at 3.60MHz. What is the value of this "nice" coil?
Answer: L equals 25330.3/(3.60 * 3.60 * 100) = 19.54 micro-Henries

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The coil and capacitor resonate at 2.1MHz
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(If you have a better understanding of why the word "tank" is used, I'll be pleased to hear it!

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73 to all in 2016

Les

25561. Re: [regenrx] Tank Circuit Calculations - L, C & F

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-03 11:49:26 UTC
From: Dan Yoder
Topic: 25559 Message: 25561

Happy New Year to the group,
This is my favorite subject and I just love this new formula and insight. I like the one with .159/sq rt of LC
I do have another tank story, I read a few days ago is that since the damped wave eventually tanks out it is a tank circuit.
W3DKY new member ARRL Christmas gift

> On Jan 3, 2016, at 2:57 AM, Bill Houghton rdrbill@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
> I suspect its called a tank circuit because the energy is stored. In capacitors energy is stored in an electric field. In inductors energy is stored in a magnetic field. At one point all of the energy will be stored in the capacitor's electric field. As the capacitor discharges the energy stored in its electric field will be stored in the inductor's magnetic field. At another point in time all of the energy will be stored in the inductor's magnetic field. As the magnetic field collapses, it's energy will be stored in the capacitor's electric field. This results in a recirculating current in the tank circuit. If there were no system losses, the current in the tank circuit would continue forever.
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> 2 pi fL = 1/(2 pi fC)
>
> 73,
>
> Bill, WA6NEQ
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>
>
> From: "les.au49@... [regenrx]" <regenrx@yahoogroups.com>
> To: regenrx@yahoogroups.com
> Sent: Saturday, January 2, 2016 11:15 PM
> Subject: [regenrx] Tank Circuit Calculations - L, C & F
>
>
> G'day all:
>
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> Les
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>

25562. Re: Tank Circuit Calculations - L, C & F

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-03 14:16:47 UTC
From: kevinferg@...
Topic: 25559 Message: 25562

If you bias your LC circuit to a negative value, then you have an under-ground tank circuit.

25563. Re: [regenrx] Re: Tank Circuit Calculations - L, C & F

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-03 16:21:39 UTC
From: msalbert@...
Topic: 25559 Message: 25563

This is one good online calculator I found, in that it works with "real" units of your choice (don't have to use exponents or count zeroes ;-)
http://www.1728.org/resfreq.htm

You can solve for any unknown parameter (L, C or freq)

Regards,
Mark KB9VKE

-----Original Message-----
From: kevinferg@... [regenrx] <regenrx@yahoogroups.com>
To: regenrx <regenrx@yahoogroups.com>
Sent: Sun, Jan 3, 2016 9:14 am
Subject: [regenrx] Re: Tank Circuit Calculations - L, C & F

If you bias your LC circuit to a negative value, then you have an under-ground tank circuit.

25564. Re: [regenrx] Tank Circuit Calculations - L, C & F

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-03 16:44:00 UTC
From: Rob
Topic: 25559 Message: 25564

THANK YOU for the examples....it really makes sense out of it.

On 01/03/2016 02:15 AM, les.au49@... [regenrx] wrote:
>
> G'day all:
>
> The ARRL handbook from "those days" gave a short formula relating
> inductance (microhenries), capacitance (pico-Farad) and Frequency (MHz).
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> This is more accurate than YOU need, but you can check the accuracy of
> your calculation from the example. If you have a 20uH coil, your
> capacitor must be 99.9pF.
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> value. Your "prize" coil, wound on a ceramic former (and very nice)
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25565. Re: Tank Circuit Calculations - L, C & F

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-03 21:11:23 UTC
From: les.au49@...
Topic: 25559 Message: 25565

Hello Rob, The on-line calculator is certainly superior - especially where you wish to work with Hertz, microFarads and Henries. My difficulty is that I read the ARRL handbook diligently, and I can't forget that formula from "times past". HA! I use it often! Les

25567. Re: [regenrx] Re: Tank Circuit Calculations - L, C & F

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-04 01:54:55 UTC
From: Rob
Topic: 25559 Message: 25567

As nice as the online calculator is at http://www.1728.org/resfreq.htm
I REALLY appreciate the detailed explanation:

Printed ..... saved... on READ ONLY MEDIA then snapshot taken and posted
forever where I KNOW
I will not lose it online at
http://www.learnmorsecode.com/help/regen/tankcalc.jpg

THANK YOU

++
L * C equals 25330.29/(F * F) OR USE
L=1/(((6.28*freq)^2)*Cap)
L is uH C is pF F is Mhz L is
H freq is hertz Cap is F (lots of zeros so use EXP -10 for 100pF)

Example #1.
If you want to build a circuit that tunes 3.56 MHz then the product of
LC must be 25330.29/(3.56 * 3.56) = 1998.66

This is more accurate than YOU need, but you can check the accuracy of
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Example #3. Known "L", unknown "C".
The coil and capacitor resonate at 2.1MHz The coil inductance is
9.5uH What value is the capacitor.
C equals 25330.3/(Freq * Freq * L) = 25330.3/(2.1 * 2.1 * 9.5) =
604pF

Example #4. I have a 15uH coil and a 150pF capacitor. What is the
resonant frequency of the tank circuit?
Freq equals sqrt (25330.3/LC) = sqrt(25330.3/(15*150)MHz = sqrt(11.26) =
3.355MHz

++

On 01/03/2016 04:11 PM, les.au49@... [regenrx] wrote:
>
> Hello Rob, The on-line calculator is certainly superior - especially
> where you wish to work with Hertz, microFarads and Henries. My
> difficulty is that I read the ARRL handbook diligently, and I can't

> forget that formula from "times past". HA! I use it often! Les
>
>
> ---
> Posted by: les.au49@...
> ---
>

25568. Re: [regenrx] Finding resonant frequency of a L/C circuit

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-04 03:41:52 UTC
From: willard561@...
Topic: 25550 Message: 25568

If you lived closer to Oregon, I have a Boonton 71AR L/C meter I gift you with

25569. Regeneration by lifting suppressor grid of pentode?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-04 16:01:20 UTC
From: kevinferg@...
Topic: 25569 Message: 25569

I have never read an understandable explanation of how this works. Yes, I know how the circuit is configured, and that it DOES work, just not the how and why of it.

I am messing about with the Knight Kit Star Roamer general coverage receiver that my Dad helped my older brother build when I was really young. It uses regeneration in the IF via the subject method. This is done to increase sensitivity, as a Q multiplier, and in oself oscillating mode to provide a beat note for CW reception. The action of the circuit seems to be VERY sensitive to adjustment of the IF cans.

In particular, it would be nice to know if the regeneration is more dependant on the input or the output IF transformer for this stage. (The one connected to the plate, or to the control grid, in other words.)

Years ago I was messing about with this trying to get it to work, and managed to destroy one of the IF cans, even though I did have a proper plastic hex tool.

I was finally able to obtain a NOS set of IF cans that fit correctly. (ebay) These are working, more or less. (I am able to recieve strong local stations, and 10MHz WWV at approximatly the correct dial settings.)

Before I try to improve the alignment, I want a good understanding of the circuit, so I can "get in, and get out" and hopefully minimize the chance of ruining another IF transformer. They are becoming really hard to replace.

Here is a detail of the schematic showing the IF. R4 is the regeneration control, labeled "Sens."
https://kevbo.smugmug.com/Electronics/i-tFsQDHK/0/O/star%20roamer%20IF.jpg
https://kevbo.smugmug.com/Electronics/i-tFsQDHK/0/O/star%20roamer%20IF.jpg

https://kevbo.smugmug.com/Electronics/i-tFsQDHK/0/O/star%20roamer%20IF.jpg

https://kevbo.smugmug.com/Electronics/i-tFsQDHK/0/O/star...
https://kevbo.smugmug.com/Electronics/i-tFsQDHK/0/O/star%20roamer%20IF.jpg

View on kevbo.smugmug.com
https://kevbo.smugmug.com/Electronics/i-tFsQDHK/0/O/star%20roamer%20IF.jpg
Preview by Yahoo

Here is a link to the full manual PDF:
http://bama.edebris.com/download/knight/str-rmr/strrmr.pdf
http://bama.edebris.com/download/knight/str-rmr/strrmr.pdf

25570. Re: Regeneration by lifting suppressor grid of pentode?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-04 16:22:49 UTC
From: kevinferg@...
Topic: 25569 Message: 25570

And as soon as I posted my google-fu improved. The magic phrase seems to be Dynatron oscillator:

Dynatron oscillator - Wikipedia, the free encyclopedia
https://en.wikipedia.org/wiki/Dynatron_oscillator

https://en.wikipedia.org/wiki/Dynatron_oscillator

Dynatron oscillator - Wikipedia, the free encycl...
https://en.wikipedia.org/wiki/Dynatron_oscillator In electronics, the dynatron oscillator, invented in 1918 by Albert Hull[1][2] at General Electric, is an obsolete vacuum tube electronic oscillator circuit which u...

View on en.wikipedia.org https://en.wikipedia.org/wiki/Dynatron_oscillator
Preview by Yahoo

Comments and discussion still most welcome.

25571. Re: [regenrx] Re: Regeneration by lifting suppressor grid of pentode?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-04 17:19:09 UTC
From: Bill Cromwell
Topic: 25569 Message: 25571

Hi Kevin,

It has been quite a few decades since I used a Star Roamer. The BFO function wasn't all that great BUT it did work..mostly. Looking over the schematic I think the plate circuit is the most likely suspect since the suppressor grid is the element being changed by the sensitity control and that removes the 'shielding between plate and screen. Make sure all the other IF slugs are peaked. The plate slug might be used to change the frequency of the "BFO" and it will more useful tuned to one side of the peak for CW. But you are up the creek for changing Sidebands while listening to SSB. With all four slugs set at peak the BFO will be in the center of the passband and you have the audio image for all signals depending on how you tune.

It's not useless but you will have to be a *radio operator* to get satisfaction. If you do get the hang of it you'll be batter off AND you'll appreciate better designs. Enjoy your Star Roamer.

73,

Bill KU8H

On 01/04/2016 11:22 AM, kevinferg@... [regenrx] wrote:
>
> And as soon as I posted my google-fu improved. The magic phrase seems
> to be Dynatron oscillator:
>
> ---snipped-------
>
> Comments and discussion still most welcome.
>
>
> ---
> Posted by: kevinferg@...
> ---
> <https://groups.yahoo.com/neo/groups/regenrx/conversations/messages/25570;_ylc=X3oDMTJyd
HE2bWEwBF9TAzk3MzU5NzE0BGdycElkAzEzOTk2OTA3BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAMyNTU3MARzZWM
DZnRyBHNsawNycGx5BHN0aW1lAzE0NTE5MjQ1NzA-?act=reply&messageNum=25570>
>
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>

25572. Re: [regenrx] Re: Regeneration by lifting suppressor grid of pentode?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-04 17:39:45 UTC
From: Hubert Miller
Topic: 25569 Message: 25572

I think the magic word is "grid-plate capacitance" no longer interrupted
by the suppressor being above ground.
Other radios using this shortcut were the SX-140 and S-119.
-Hue Miller

------ Original Message ------
From: "kevinferg@... [regenrx]" <regenrx@yahoogroups.com>
To: regenrx@yahoogroups.com
Sent: 1/4/2016 8:22:49 AM
Subject: [regenrx] Re: Regeneration by lifting suppressor grid of
pentode?

And as soon as I posted my google-fu improved. The magic phrase seems
to be Dynatron oscillator:

Dynatron oscillator - Wikipedia, the free encyclopedia
Dynatron oscillator - Wikipedia, the free encycl...
In electronics, the dynatron oscillator, invented in 1918 by Albert
Hull[1][2] at General Electric, is an obsolete vacuum tube electronic
oscillator circuit which u...
View on en.wikipedia.org
Preview by Yahoo

Comments and discussion still most welcome.

25573. Re: [regenrx] Re: Regeneration by lifting suppressor grid of pentode? A MUCH BETTER SOLUTION !!!

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-04 18:05:53 UTC
From: Prof Arnaldo Coro Antich
Topic: 25569 Message: 25573

Dear amigos...
I remember one of those Hallicrafters that did not had
a ? real BFO ? ...
What I did was to build into a small aluminium box
a one tube BFO, that required some experimenting with
the proper injection level to the detector stage.
It proved to be a very good project, because the receiver's
performance and ease of tuning on CW improved
significantly !!!
73 and DX
Arnie Coro
CO2KK
Host of Dxers Unlimited

On 04/01/16 12:39, Hubert Miller kargo_cult@... [regenrx] wrote:
>
>
> I think the magic word is "grid-plate capacitance" no longer
> interrupted by the suppressor being above ground.
> Other radios using this shortcut were the SX-140 and S-119.
> -Hue Miller
> ------ Original Message ------
> From: "kevinferg@... [regenrx]" <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>>
> To: regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>
> Sent: 1/4/2016 8:22:49 AM
> Subject: [regenrx] Re: Regeneration by lifting suppressor grid of pentode?
>
> And as soon as I posted my google-fu improved. The magic phrase seems
> to be Dynatron oscillator:
>
>
>
> Dynatron oscillator - Wikipedia, the free encyclopedia
> <https://en.wikipedia.org/wiki/Dynatron_oscillator>
>
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>
> image <https://en.wikipedia.org/wiki/Dynatron_oscillator>
>
>
> Dynatron oscillator - Wikipedia, the free encycl...
> <https://en.wikipedia.org/wiki/Dynatron_oscillator>
> In electronics, the dynatron oscillator, invented in 1918 by Albert
> Hull[1][2] at Gen eral Electric, is an obsolete vacuum tube electronic

> oscillator circuit which u...
>
> View on en.wikipedia.org
> <https://en.wikipedia.org/wiki/Dynatron_oscillator>
>
> Preview by Yahoo
>
>
>
> Comments and discussion still most welcome.
>
>
>
>

25574. Re: [regenrx] Re: Regeneration by lifting suppressor grid of pentode?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-04 19:24:03 UTC
From: Leonard Meek
Topic: 25569 Message: 25574

I have an S-38E that used the same method of regen. I replaced it with a SS BFO.

Leonard

----- Original Message -----
From: Hubert Miller kargo_cult@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Monday, January 04, 2016 7:39 AM
Subject: Re: [regenrx] Re: Regeneration by lifting suppressor grid of pentode?

I think the magic word is "grid-plate capacitance" no longer interrupted by the suppressor being above ground.
Other radios using this shortcut were the SX-140 and S-119.
-Hue Miller

------ Original Message ------
From: "kevinferg@... [regenrx]" <regenrx@yahoogroups.com>
To: regenrx@yahoogroups.com
Sent: 1/4/2016 8:22:49 AM
Subject: [regenrx] Re: Regeneration by lifting suppressor grid of pentode?

And as soon as I posted my google-fu improved. The magic phrase seems to be Dynatron oscillator:

Dynatron oscillator - Wikipedia, the free encyclopedia
Dynatron oscillator - Wikipedia, the free encycl...
In electronics, the dynatron oscillator, invented in 1918 by Albert Hull[1][2] at General Electric, is an obsolete vacuum tube electronic oscillator circuit which u...
View on en.wikipedia.org Preview by Yahoo

Comments and discussion still most welcome.

25575. Re[2]: [regenrx] Re: Band Switching Regen for 40/80 [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-05 04:26:22 UTC
From: Hubert Miller
Topic: 25513 Message: 25575

Following reading Doug's posts about his 2-trans regen using selected J310's, i decided to get my own
stock. It's great that they're so low priced. I got 40 of them, and a good selection of torroid cores. So
thanks for the tip, Doug.

I did note immediately on opening the Post Office envelope that the sender was a smoker. How did i
know this? I also know that smokers don't like to hear about 'that smell'. What a strange habit.
-Hue Miller

25576. Re: Re[2]: [regenrx] Re: Band Switching Regen for 40/80

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-05 07:15:17 UTC
From: Doug Hancock
Topic: 25513 Message: 25576

Hue,

Watch out if you use the toroids for your tank circuit! Its hard to adjust your tickler windings because one pass through the toroid is often too much and dont know how you could get less than one turn feedback.

People smoking around me used to not bother me, but lately, as soon as someone lights up I find a reason to run away. That stuff sure permeates everything.

Doug

On Monday, January 4, 2016 10:26 PM, "Hubert Miller kargo_cult@... [regenrx]" <regenrx@yahoogroups.com> wrote:

Following reading Doug's posts about his 2-trans regen using selected J310's, i decided to get my ownstock. It's great that they're so low priced. I got 40 of them, and a good selection of torroid cores. Sothanks for the tip, Doug. I did note immediately on opening the Post Office envelope that the sender was a smoker. How did i know this? I also know that smokers don't like to hear about 'that smell'. What a strange habit.-Hue Miller

25577. Re: Regeneration by lifting suppressor grid of pentode?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-05 11:25:01 UTC
From: b_weeber@...
Topic: 25569 Message: 25577

I have one S-38C with that wire wraped around the plate pin. The bfo oscillates, but the frequency is about 20 kHz away from 455kHz / if passband. Once a station beats with the bfo, the signal is so far away, the loudness is already very low. In the same time the disturbing qrm is still peaking, which causes a bad s/n ratio.

Bernd

25578. Re: [regenrx] Re: Regeneration by lifting suppressor grid of pentode?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-05 11:48:54 UTC
From: Hubert Miller
Topic: 25569 Message: 25578

Throwing the IF stage with its 2 LC circuits at 455 kHz shouldn't change the frequency 20 kHz unless maybe the current thru the tube radically changes during oscillation. The bias voltages are all correct ?
-Hue

------ Original Message ------
From: "b_weeber@... [regenrx]" <regenrx@yahoogroups.com>
To: regenrx@yahoogroups.com
I have one S-38C with that wire wraped around the plate pin. The bfo oscillates, but the frequency is about 20 kHz away from 455kHz / if passband. Once a station beats with the bfo, the signal is so far away, the loudness is already very low. In the same time the disturbing qrm is still peaking, which causes a bad s/n ratio.

Bernd

25579. Re: [regenrx] Re: Band Switching Regen for 40/80

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-05 14:00:10 UTC
From: Bill Cromwell
Topic: 25513 Message: 25579

Hi,

Many transistors are almost (virtually) free. The energy to run them is also quite modest.

Within a few months of smoking my last cigarette (decades ago) I bought another new car (a pickup truck actually). In mid winter, windows all rolled up, 70 mph on the expressway a smoker in his car passed me. I was amazed that I could smell his cigarette smoke through two sets of closed windows with ~70 mph intervening winds. That gunk *eats* electronic parts, too. Radios and accordions that smell of tobacco smoke are not good buys.

73,

Bill KU8H

On 01/04/2016 11:26 PM, Hubert Miller kargo_cult@... [regenrx] wrote:
>
> Following reading Doug's posts about his 2-trans regen using selected
> J310's, i decided to get my own
> stock. It's great that they're so low priced. I got 40 of them, and a
> good selection of torroid cores. So
> thanks for the tip, Doug.
> I did note immediately on opening the Post Office envelope that the
> sender was a smoker. How did i
> know this? I also know that smokers don't like to hear about 'that
> smell'. What a strange habit.
> -Hue Miller
>

25580. Re: Regeneration by lifting suppressor grid of pentode?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-05 16:34:51 UTC
From: winston376@...
Topic: 25569 Message: 25580

Interelectrode capacitance. The 5k pot is in series with the 2.2k resistor and varying the pot increases or decreases the amplitude of the current flow which is probably close to being in-phase.

Alex

25581. Re: Regeneration by lifting suppressor grid of pentode?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-05 16:38:16 UTC
From: winston376@...
Topic: 25569 Message: 25581

Addendum.

The pot most likely also changes the phase since it forms an RC circuit.

A

25582. Re: Regeneration by lifting suppressor grid of pentode?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-05 23:10:03 UTC
From: b_weeber@...
Topic: 25569 Message: 25582

** maybe the current thru the tube radically changes during oscillation

The coupling is very loose and the amplitude is not very high. My voltages are normal and the receiver works well with am stations. When turning on the bfo, the bias is not changing, but the coupling between grid and plate increases by ~1pF. Because the tube has a amplification, the Miller effect increases the capacity to a multiple of this 1pF and IMO causes the frequency deviation.

The S-38A has one extra tube for the bfo. People, who own one, mention, that this combination works well. Then Hallicrafters tried to save the tube, which caused the B and C type, to get worse. They changed the circuit on the following models again, which for me is an evidence, that former owners have been complaining.

Best regards,
Bernd

25583. Re: [regenrx] Re: Regeneration by lifting suppressor grid of pentode?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-06 06:10:00 UTC
From: Hubert Miller
Topic: 25569 Message: 25583

I think your explanation seems the correct one.
If it is, the only way to counteract that would have been to use a much higher C:L ratio in the IF tuned circuit, but that would have lowered the
output impedance and lessened the sensitivity. Still, maybe that would work; i'm just speculating.

You are saying the IF frequency change is only noticed when oscillating? I understand it would be hard to observe when not oscillating, only approaching.

For the circuit to oscillate, the plate circuit has to be seen as capacitive reactance compared to the input tuned circuit, to complete the
correct phase shift for the feedback. That means the plate circuit has to be at a resonant frequency higher than the oscillating frequency.
Sorry, i'm just thinking about this interesting problem. It's obvious the circuit designers didn't spend too much time on it.
I'm wondering if some kind of stagger-tuning the IF circuits would minimize this.
-Hue

------ Original Message ------
Sent: 1/5/2016 3:10:03 PM
Subject: [regenrx] Re: Regeneration by lifting suppressor grid of pentode?

** maybe the current thru the tube radically changes during oscillation

The coupling is very loose and the amplitude is not very high. My voltages are normal and the receiver works well with am stations. When turning on the bfo, the bias is not changing, but the coupling between grid and plate increases by ~1pF. Because the tube has a amplification, the Miller effect increases the capacity to a multiple of this 1pF and IMO causes the frequency deviation.

The S-38A has one extra tube for the bfo. People, who own one, mention, that this combination works well. Then Hallicrafters tried to save the tube, which caused the B and C type, to get worse. They changed the circuit on the following models again, which for me is an evidence, that former owners have been complaining.

Best regards,
Bernd

25584. Re: [regenrx] Re: Regeneration by lifting suppressor grid of pentode?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-06 14:25:13 UTC
From: b_weeber@...
Topic: 25569 Message: 25584

Hello Hue

** it would be hard to observe when not oscillating
The if has been adjusted before with help af a wobbulator. The passband looked nice and narrow. After recognizing the bfo frequency deviation, i tried to find a compromise setup. It was impossible, to tune the bfo frequency close to the 455 kHz and in the same time keep a usable if filter curve.

Bernd

https://xa.yimg.com/df/regenrx/S38c_IF-Amp%26BFO.gif?token=GUqCGl664LN52NiTptKmDQBzSjO4ApbS3iSgAj0TJLt6t82dV2wM3g1FxoAsZNPSxEIRWj92JHMFbx2zzhoscsX74D1FF-4Z20nn82-0Gp6abOpb https://xa.yimg.com/df/regenrx/S38c_IF-Amp%26BFO.gif?token=GUqCGl664LN52NiTptKmDQBzSjO4ApbS3iSgAj0TJLt6t82dV2wM3g1FxoAsZNPSxEIRWj92JHMFbx2zzhoscsX74D1FF-4Z20nn82-0Gp6abOpb&type=download

https://xa.yimg.com/df/regenrx/S38c_IF-Amp%26BFO.gif?token=GUqCGl664LN52NiTptKmDQBzSjO4ApbS3iSgAj0TJLt6t82dV2wM3g1FxoAsZNPSxEIRWj92JHMFbx2zzhoscsX74D1FF-4Z20nn82-0Gp6abOpb&type=download

https://xa.yimg.com/df/regenrx/S38c_IF-Amp%26BFO.gif?... https://xa.yimg.com/df/regenrx/S38c_IF-Amp%26BFO.gif?token=GUqCGl664LN52NiTptKmDQBzSjO4ApbS3iSgAj0TJLt6t82dV2wM3g1FxoAsZNPSxEIRWj92JHMFbx2zzhoscsX74D1FF-4Z20nn82-0Gp6abOpb&type=download

View on xa.yimg.com https://xa.yimg.com/df/regenrx/S38c_IF-Amp%26BFO.gif?token=GUqCGl664LN52NiTptKmDQBzSjO4ApbS3iSgAj0TJLt6t82dV2wM3g1FxoAsZNPSxEIRWj92JHMFbx2zzhoscsX74D1FF-4Z20nn82-0Gp6abOpb&type=download
Preview by Yahoo

25585. Re: [regenrx] Re: Regeneration by lifting suppressor grid of pentode?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-06 19:17:39 UTC
From: Bill Cromwell
Topic: 25569 Message: 25585

Hi,

I think over the years everybody has agreed the *fake* BFO is not not nearly as good as a *real* BFO but a fake BFO is much better than *no* BFO at all. Every decision is a compromise most of the time. With radios like the Star Roamer you get the radio cheaper. You are required to live with the consequences of that decision. My own memories of using the Star Roamer are good ones in spite of it's sometimes annoying limitations. Tune your IF as stated in the manual (the wobbulator is a goof choice) and then enjoy it for what it is.

73,

Bill KU8H

On 01/06/2016 09:25 AM, b_weeber@... [regenrx] wrote:
>
> Hello Hue
>
> ** it would be hard to observe when not oscillating
> The if has been adjusted before with help af a wobbulator. The
> passband looked nice and narrow. After recognizing the bfo frequency
> deviation, i tried to find a compromise setup. It was impossible, to
> tune the bfo frequency close to the 455 kHz and in the same time keep
> a usable if filter curve.
>
> Bernd
>

25586. Re[2]: [regenrx] Re: Regeneration by lifting suppressor grid of pentode?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-06 20:01:09 UTC
From: Hubert Miller
Topic: 25569 Message: 25586

I wonder if users of the Star Roamer and Hallicrafters SX-140 noticed
this same effect, IF frequency shift, when in the BFO mode.
No one has reported it. It may be just that no one really noticed it,
among the other other characterisitics such as fussiness, lack
of sensitivity, etc., generally not stellar performance.
-Hue

Subject: Re: [regenrx] Re: Regeneration by lifting suppressor grid of
pentode?

Hi,
I think over the years everybody has agreed the *fake* BFO is not not
nearly as good as a *real* BFO but a fake BFO is much better than *no*
BFO at all. Every decision is a compromise most of the time. With radios
like the Star Roamer you get the radio cheaper. You are required to live
with the consequences of that decision. My own memories of using the
Star Roamer are good ones in spite of it's sometimes annoying
limitations. Tune your IF as stated in the manual (the wobbulator is a
good choice) and then enjoy it for what it is. 73, Bill KU8H

25587. Re: [regenrx] Re: Regeneration by lifting suppressor grid of pentode?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-06 20:14:28 UTC
From: Bill Cromwell
Topic: 25569 Message: 25587

On 01/06/2016 03:01 PM, Hubert Miller kargo_cult@... [regenrx] wrote:
>
>
> I wonder if users of the Star Roamer and Hallicrafters SX-140 noticed
> this same effect, IF frequency shift, when in the BFO mode.
> No one has reported it. It may be just that no one really noticed it,
> among the other other characterisitics such as fussiness, lack
> of sensitivity, etc., generally not stellar performance.
> -Hue
>
> Subject: Re: [regenrx] Re: Regeneration by lifting suppressor grid of
> pentode?
>
> Hi,
> I think over the years everybody has agreed the *fake* BFO is not not
> nearly as good as a *real* BFO but a fake BFO is much better than *no*
> BFO at all. Every decision is a compromise most of the time. With radios
> like the Star Roamer you get the radio cheaper. You are required to live
> with the consequences of that decision. My own memories of using the
> Star Roamer are good ones in spite of it's sometimes annoying
> limitations. Tune your IF as stated in the manual (the wobbulator is a
> good choice) and then enjoy it for what it is. 73, Bill KU8H
>
>

25588. Re: [regenrx] Re: Regeneration by lifting suppressor grid of pentode?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-06 20:20:03 UTC
From: Bill Cromwell
Topic: 25569 Message: 25588

Hi,

I missed something along the way about the BFO shifting frequency from it's non-oscillating state to it's oscillating state. Well yes. From zero Hertz to something near 455 kHz. Obviously something else must have been meant. If you know that it is oscillating to one side of the IF passband that is ideal! Absolutely perfect! Well.. maybe not that good but better than oscillating in the center (+/- zero Hz). You almost always want the BFO down one passband slope or the other.

73,

Bill KU8H

On 01/06/2016 03:01 PM, Hubert Miller kargo_cult@... [regenrx] wrote:
>
>
> I wonder if users of the Star Roamer and Hallicrafters SX-140 noticed
> this same effect, IF frequency shift, when in the BFO mode.
> No one has reported it. It may be just that no one really noticed it,
> among the other other characterisitics such as fussiness, lack
> of sensitivity, etc., generally not stellar performance.
> -Hue
>

25589. Re: Regeneration by lifting suppressor grid of pentode?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-07 01:39:29 UTC
From: b_weeber@...
Topic: 25569 Message: 25589

But what about the other sideband? You want to receive lsb and usb. As long as the bfo can't be tuned, it should oscillate somewhere inside of the passband. Eventually a Colpitts-Circuit could have solved the problem.

Regenerative Receiver Group
https://groups.yahoo.com/neo/groups/regenrx/files/S38c_IF-Amp&BFO.gif

https://groups.yahoo.com/neo/groups/regenrx/files/S38c_IF-Amp&BFO.gif

Regenerative Receiver Group
https://groups.yahoo.com/neo/groups/regenrx/files/S38c_IF-Amp&BFO.gif The purpose of this group is to facilitate the exchange of information, experiences and ideas aimed at the promotion of and encouragement in operating, designing ...

View on groups.yahoo.com
https://groups.yahoo.com/neo/groups/regenrx/files/S38c_IF-Amp&BFO.gif
Preview by Yahoo

25590. Re: [regenrx] Re: Regeneration by lifting suppressor grid of pentode?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-07 03:10:35 UTC
From: Bill Cromwell
Topic: 25569 Message: 25590

Hi,

Did anybody mention this is a cheap way to get a BFO and does have some disadvantages? There..I just mentioned it - again. An additional stage would cost more money. Read some of the rants that have appeared on usenet and the mail reflectors over *pennies*.

On the ham bands we use LSB at 7 MHz and lower frequency bands. We use USB for 14 MHz and higher bands. 10 MHZ is CW or digital and sideband can be finagled for digital and matters not on CW. So it will actually work if the VFO works above the incoming signal on 160 through 40 meters, and below the incoming signal on 14 MHZ and higher. Or the other way 'round'. The side bands trade places. If I still had a Star Roamer I would measure the *fake* BFO signal - again. I'll leave that to somebody else. Somebody who actually has one today.

The *fake* BFO is where it is. Best of luck and enjoy the radio for what it is.

On 01/06/2016 08:39 PM, b_weeber@... [regenrx] wrote:
>
> But what about the other sideband? You want to receive lsb and usb. As
> long as the bfo can't be tuned, it should oscillate somewhere inside
> of the passband. Eventually a Colpitts-Circuit could have solved the
> problem.
> <https://groups.yahoo.com/neo/groups/regenrx/files/S38c_IF-Amp&BFO.gif>
>

25591. Re[2]: [regenrx] Re: Regeneration by lifting suppressor grid of pentode?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-07 05:03:40 UTC
From: Hubert Miller
Topic: 25569 Message: 25591

Bill, i think you kinda maybe missed some of the messages on this topic.
Berndt says when the S-38 goes into oscillation,
the frequency of oscillation is offset from the IF center by 20 kHz. I
think Berndt is right when he says a better type
of regenerative IF stage would have used a Colpitts feedback stage.
Instead of TPTG oscillator, which is what the IF
becomes when the suppressor becomes disabled. A 20 kHz offset certainly
doesn't make the best use of the IF LC's
tuned to 455 kHz.
Almost makes me wish i had one of the radios using this scheme, so i
could try to improve it. Almost. Too many
projects as it is.
-Hue

------ Original Message ------
From: "Bill Cromwell wrcromwell@... [regenrx]"
<regenrx@yahoogroups.com>

Did anybody mention this is a cheap way to get a BFO and does have some
disadvantages? There..I just mentioned it - again. An additional stage
would cost more money. Read some of the rants that have appeared on
usenet and the mail reflectors over *pennies*.

25592. Re: [regenrx] Re: Regeneration by lifting suppressor grid of pentode?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-07 11:58:38 UTC
From: Bill Cromwell
Topic: 25569 Message: 25592

Hi Hue,

Thanks. Yes I did miss some of the messages including that somebody measured the "BFO" offset. 20 kc is just too much. I also had thought the thread was about the Star Roamers. I had and used one of those. I don't even have the notes any more but for the individual radio I had the offset was not unreasonable and worked out to be correct for the different ham bands. I know nothing of S-38s or even *other* Star Roamers for that matter.

It would be fun to play with one again but as you said..to many other things have priority. I'm working on homebrew SDR hardware. The part that lives outside the computer. Vacuum tube SDR anyone? As part of that exploration I have fed computer sound card based DSP systems with the output from regens. Not so very far off topic and very encouraging.

On 01/07/2016 12:03 AM, Hubert Miller kargo_cult@... [regenrx] wrote:
>
> Bill, i think you kinda maybe missed some of the messages on this
> topic. Berndt says when the S-38 goes into oscillation,
> the frequency of oscillation is offset from the IF center by 20 kHz. I
> think Berndt is right when he says a better type
> of regenerative IF stage would have used a Colpitts feedback stage.
> Instead of TPTG oscillator, which is what the IF
> becomes when the suppressor becomes disabled. A 20 kHz offset
> certainly doesn't make the best use of the IF LC's
> tuned to 455 kHz.
> Almost makes me wish i had one of the radios using this scheme, so i
> could try to improve it. Almost. Too many
> projects as it is.
> -Hue
>

25593. S-38C BFO

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-07 21:23:01 UTC
From: Leonard Meek
Topic: 25593 Message: 25593

Bernd, that's the way the Sam's Photofact shows the S-38C BFO circuit, except C29 & C30 appear to be adjustable.

Leonard

25594. Ten Tec

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-08 01:02:03 UTC
From: Hubert Miller
Topic: 25594 Message: 25594

Ten Tec once offered regen receiver kits, but then that came to an end.
I just read a letter to the amateur repairs list from the owner of
Dishtronix
http://www.dishtronix.com/about.html
which frankly, i had never heard of before. The firm has apparently
downsized
its employee count but will stay in Tennessee U.S.A., however it sounds
like the
new products envisioned will be even more upscale and higher tech -
definitely
no beginner kits anymore.
-Hue Miller

25596. Re: [regenrx] An interesting site for vintage electronics info.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-08 02:20:22 UTC
From: Hubert Miller
Topic: 25595 Message: 25596

Thanks, Phil - the site has a much more interesting list than i expected when i read your email.
Now i'll have to go thru my books again, and see what i don't really need in hardcopy.
And maybe see what i have that an online publisher might like to use.....like that heavy hardback volume on tunnel diodes that's lying on the floor here.

BTW, are you sure 125 GB? That's not what the site says for totals.
-Hue Miller

------ Original Message ------
From: "Phil ko6bb1@... [regenrx]" <regenrx@yahoogroups.com>
Sent: 1/7/2016 5:15:07 PM

Due to a posting on one of the other mail reflectors I ran across the following site that has a LOT of vintage radio manuals and other general electronics information. I just completed downloading all of it and adding it to my "Electronics Information" folder with is about 125GB in size. . .

The site is from Argentina and is in Spanish, but much of the material is in English.
http://www.acrayara.com.ar/cms/RM?action=listLibraryFiles

25598. Re: Ten Tec

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-08 02:49:05 UTC
From: wb8yyy@...
Topic: 25594 Message: 25598

Rare to have a major ham equipment supplier die and come back to life as history is not good in this regard. Most likely if they do come back it will he with very different products.

Some nice regen kits have geen recently offered by 4stateqrp and qrpkits.com.

Another trend is taking assembled modules, something like a dongle or dds circuit board and crafting a project from it. Our demise of opportunity is exagerated we just have to adapt as needed.

73 curt

25599. Re[2]: [regenrx] Re: Regeneration by lifting suppressor grid of pentode?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-08 07:16:46 UTC
From: Hubert Miller
Topic: 25569 Message: 25599

I think there's one more radio that used this way to get a BFO signal.
That's the Ecophone EC-1.
That was a really budget, minimum receiver. It covered 0.55 - 30 MHz in
THREE bands.
-Hue

25600. Re: Regeneration by lifting suppressor grid of pentode?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-08 09:33:05 UTC
From: les.au49@...
Topic: 25569 Message: 25600

Hello Leonard,

Do you have a new email address since your last one was hijacked?
Even now I get an occasionally "fake" email from "that address" - but not from you!
If you don't have my previous e-m address - try here at Yahoo. Les.au49@ ..... etc

Les

25602. Re: [regenrx] Re: Regeneration by lifting suppressor grid of pentode?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-08 17:10:59 UTC
From: Leonard Meek
Topic: 25569 Message: 25602

Les, I didn't know my email address had been hacked, and I'm not computer savvy enough to know what to do about it. I have't changed my address. Actually, it was set up for me and I wouldn't know how to change it. It might be a good idea since I'm starting to get a lot of junk mail.

Leonard
----- Original Message -----
From: les.au49@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Thursday, January 07, 2016 11:33 PM
Subject: [regenrx] Re: Regeneration by lifting suppressor grid of pentode?

Hello Leonard,

Do you have a new email address since your last one was hijacked?
Even now I get an occasionally "fake" email from "that address" - but not from you!
If you don't have my previous e-m address - try here at Yahoo. Les.au49@ ..... etc

Les

25603. Re: [regenrx] Ramsey Kits is no more. . .

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-08 21:59:11 UTC
From: Hubert Miller
Topic: 25601 Message: 25603

That is sad. They had quite a catalog. I almost wonder if if there's a danger for kit companies to have too wide a range of products.
I only base this on Heathkit's history.
I looked at some of their products on Amazon and was mildly surprised, but corrected, that there are no real bargains to be had.
-Hue

------ Original Message ------
From: "Phil ko6bb1@... [regenrx]" <regenrx@yahoogroups.com>

This may be OT for the RegenRX list, but perhaps some of you may be interested. Their kit department is out of business.

Check this link for the story. . .
http://www.ramseyelectronics.com/ce.htm

25604. Re: [regenrx] Re: Regeneration by lifting suppressor grid of pentode?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-08 22:22:50 UTC
From: Michael
Topic: 25569 Message: 25604

It is difficult to know what might have happened.
An email address can be lifted from the owner or from
the address book of someone else. Spammers can
either physically use the "victim's" computer to unseen spew spam
far and wide or simply mimic the email address.

If others have likewise received "fake" emails, that would be a clue.

It is always a good idea to change passwords from time to time,
in this instance for Y'hoo and for the email client (program) used.

Michael

☐ Les, I didn't know my email address had been hacked, and I'm not computer savvy enough to know what to do about it. I have't changed my address. Actually, it was set up for me and I wouldn't know how to change it. It might be a good idea since I'm starting to get a lot of junk mail.
Leonard

Hello Leonard,
Do you have a new email address since your last one was hijacked?
Even now I get an occasionally "fake" email from "that address" - but not from you!
If you don't have my previous e-m address - try here at Yahoo. Les.au49@ ..... etc
Les

25605. Re: Ramsey Kits is no more. . .

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-09 12:12:49 UTC
From: portdoverbells@...
Topic: 25601 Message: 25605

I reckon Elecraft will be next
jim

25606. 6AU6 Audio Output stage - and more

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-10 01:59:53 UTC
From: Hubert Miller
Topic: 25606 Message: 25606

I found the article i mentioned earlier about using a voltage-amplifier pentode 6AU6 for audio output in equipment where low audio power, ca. 300 mW, is all that's needed. The circuit boasts low plate power and filament power consumption.

The article is at
http://www.americanradiohistory.com/Archive-Radio-News/50s/Radio-News-1955-05.pdf

page 124.

Also very interesting in this same date are:
"A Most Unusual Oscillator" p. 52 - oscillator uses only electrons emitted from filament to operate. Not what you're thinking, that it's a filamentary
type tube with the filament voltage as B+. Illustrated is are two oscillators with no connection between the filament circuit and the rest of the circuit.
Here's an interesting statement: apparently the effect is sensitive enough that "The Seebeck effect (thermoelectric effect) from a soldered joint can
stop it".

Also: "Germanium Diode Oscillator" p. 55, discusses cooling of the diode too.
Interesting stuff, i think.
-Hue Miller

25607. Re: 6AU6 Audio Output stage - and more

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-10 04:42:09 UTC
From: les.au49@...
Topic: 25606 Message: 25607

Hello Hue,

Many transistor radios put out 250mW to the speaker.
For a long time I wondered why earlier tube-type receivers put out 1000mW (as a minimum).

Fashion, I guess.
Rather like the idea of running 'tube' receivers with 250V on the B+ line when 120 or 150V works nicely.

Les

BTW - the Radio Controlled boat on the front cover of the Radio News magazine is "heaps cool". I'll bet the woman who is controlling it is "heaps happy" too.

25608. Re: [regenrx] Re: 6AU6 Audio Output stage - and more

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-10 05:34:38 UTC
From: Hubert Miller
Topic: 25606 Message: 25608

Some of the National receivers had 2 6V6 in the audio section. I never really understood that for a supposedly communications type radio.
If you wanted to have a speaker outside and entertain a party or picnic, maybe.
Maybe it was 'bragging rights', like "Our new Model-X car has a 12-cylinder engine! Not everyone will be able to afford this!"

On the other end of the spectrum, to the more practical, i note that some of the WW2 German receivers used the same tube all the way thru, in every socket. One example is the Fu.H.E. series. With output to a couple headphones, more than enough.
-Hue
(Windows 10 + Toshiba laptop = worst possible implementation)

------ Original Message ------
To: regenrx@yahoogroups.com
Sent: 1/9/2016 8:42:09 PM

Hello Hue,
Many transistor radios put out 250mW to the speaker.
For a long time I wondered why earlier tube-type receivers put out 1000mW (as a minimum).
Fashion, I guess.
Rather like the idea of running 'tube' receivers with 250V on the B+ line when 120 or 150V works nicely.

Les

25609. Re: Ramsey Kits is no more. . .

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-10 12:23:12 UTC
From: dulmagedon@...
Topic: 25601 Message: 25609

I bought a VLF converter kit and it came a few days ago. No instructions no pictures no hint where to get them. Just a bag of parts. Eventually I found a picture on the internet and some instructions. Parts go apparently on the opposite side of the board as I normally used if the picture is right. Kinda of discouraging. Hope it works. Haven't started on it yet. Not in the mood. Should have just built my own. Built a lot of kits in my youth. Test equipment mostly. Some Heathkit some Eico. Liked Eico the best. Did my first at 9 years old. A Eico VTVM. Dad bought it and asked if I wanted to do it. We had it for years. Why one would ship a kit with no instructions is beyond me. Must be an ethnic thing. I sure don't comprehend the concept. I probably have all the same parts anyway. Tis the plan of attack that makes it work. So will I ever order another one. Probably not now. Instructions can be the difference between fun and frustration. At my present age I am not looking for more frustrations. Kit makers should be aware of that.
donVe3LYX

25610. Re: [regenrx] Re: 6AU6 Audio Output stage - and more

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-10 15:49:07 UTC
From: Michael
Topic: 25606 Message: 25610

Hue,
Dunno much about tubes, but would appreciate a link to Fu.H.E receivers, please!
(Deutsch: kein Problem.)

And don't be unkind to Win10 - it does a brilliant job at undefeatably not recognising my optical
drive :-(
XP and Linux were never able to do that !

Michael

Some of the National receivers had 2 6V6 in the audio section.
...
...some of the WW2 German receivers used the same tube all the way
thru, in every socket. One example is the Fu.H.E. series. ...
-Hue

(Windows 10 + Toshiba laptop = worst possible implementation)

25611. Re: [regenrx] Re: 6AU6 Audio Output stage - and more

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-10 16:00:31 UTC
From: willard561@...
Topic: 25606 Message: 25611

I have a National NC-100 I need a new power transformer for, in my research. I found a couple of things, it can be ran from an AC line or Battery DC power pack. When powered from the AC line it uses 2 6F6's in push pull, when powered from DC battery pack they recommend using a single 6F6.

And the DC voltage seems to be around 180 VDC for the line powered version according to what I've found

25612. Re: Regeneration by lifting suppressor grid of pentode?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-11 01:25:53 UTC
From: willard561@...
Topic: 25569 Message: 25612

The Heathkit GR-64 & GR-91 used the same BFO along with some of the Lafayette short wave receivers.
Bill

25613. German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-11 11:11:33 UTC
From: les.au49@...
Topic: 25613 Message: 25613

German Military Comms - WWII

Hello Hue, I'm posting a new topic as a result of your comment that some German receivers used a single 'tube' in a receiver. I have an article - CQ August 1980 - that makes that point for the "Tornister b". It's a 4 "tube" 'straight' regen set. The author (Dick Rollema) wrote that "although the design is over 40 years old [writing in 1980] the set still performs remarkably. As is to be expected the set is at it's best on c.w. [...] but also on the long and medium wave broadcast band many more stations were copied than on a modern superhet."

After that he comments on the performance of this set in the 40m band. "Even in Europe's extremely crowded 40m band, with it's many intruding strong broadcast stations, amateur CW signals can be easily copied at night, a test that many modern superhets fail."

All that in a back-pack regen. set with 4 tubes - all the same type!

I thought I should post those observations here!

Les

25614. Re: German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-11 11:58:24 UTC
From: dulmagedon@...
Topic: 25613 Message: 25614
Attachments: 1 described; binary payloads are missing from this source WARC

I have been saying that for years about regens in general. You can have 80 transistors and a couple of ICs superhet or a couple of tubes in a well designed regen. The number of stations found will in most cases go to the regen. I don't find it difficult to use one despite all the palaber about poor selectivity etc. And Deutsche elecktroniks were always very good ever since Hertz drew his first spark. Very hard to buy a Torn or VolksEmphanger these days. Big bucks, so I had to make my own. 4 tube transceiver complete with Deutsche labling.
don KARL"dolmetsch"Ve3LYX

25615. RE: [regenrx] German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-11 13:52:53 UTC
From: Mike Feher
Topic: 25613 Message: 25615

Maybe someone should have a frequency stability vs. weight graph. I have a lot of those WWII German military receivers and they not only were built like a tank, they also weighed close to one. Superb craftsmanship. The small Volksemphanger is a different class altogether, and, as a receiver is really poor. That was also by design. 73 – Mike

Mike B. Feher, N4FS

89 Arnold Blvd.

Howell, NJ, 07731

732-886-5960

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Monday, January 11, 2016 6:12 AM
To: regenrx@yahoogroups.com
Subject: [regenrx] German Communications from WWII

German Military Comms - WWII

Hello Hue, I'm posting a new topic as a result of your comment that some German receivers used a single 'tube' in a receiver. I have an article - CQ August 1980 - that makes that point for the "Tornister b". It's a 4 "tube" 'straight' regen set. The author (Dick Rollema) wrote that "although the design is over 40 years old [writing in 1980] the set still performs remarkably. As is to be expected the set is at it's best on c.w. [...] but also on the long and medium wave broadcast band many more stations were copied than on a modern superhet."

After that he comments on the performance of this set in the 40m band. "Even in Europe's extremely crowded 40m band, with it's many intruding strong broadcast stations, amateur CW signals can be easily copied at night, a test that many modern superhets fail."

All that in a back-pack regen. set with 4 tubes - all the same type!

I thought I should post those observations here!

Les

25616. RE: [regenrx] German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-11 17:44:35 UTC
From: dulmagedon@...
Topic: 25613 Message: 25616

Speaking of built like a tank, As a young teenager before I could drive (legally;>) I had bought a pair of No 11 Wireless Sets.; One I was able to get running. They were built before the No 19 but used in the same application. Where the No 19 s a kinda light weight tinny set they were built tough as nails. All the bypass caps were bolted in on the ground side and the brackets were over 1\8 inch think. Vernier was gear reduction and I think you could have dropped one of the Empire State building and it would have survived. My Dad's Lab was doing a final test of a set of HF radios for one of the oil companies and they wanted to test against another HF set. Since my good No 11 was made by their company (PYE) during the war he wanted me to set it up in the lab so they could use it to compare. He told me years later (which speaks to what Mike just said) It was far more stable a radio then the new set would ever hope to be. In fact he said ROCK SOLID. Unfortunately when I discovered cars and girls I forgot about radios for awhile and left them somewhere in one of my many moves. I have never had the oppourtunity to replace them and have only seen one other since (Communications Museum at CFB Kingston.) Speaking of German radios . Rhine River cruises often stop overnight in Speyer Germany. People go up town in the morning. If you go the opposite way from the doc they show you there is Speyer Tekniks Museum just a few hundred yards from the dock and they have a large well equipped radio room from that era about centre of the back wall of the museum.
donVe3LYX

25617. Re: [regenrx] German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-12 02:52:52 UTC
From: John
Topic: 25613 Message: 25617

Hi Mike,

I remember seeing a Torn at Kutztown and being *very* impressed. This model had a turret band switch, and one section was warped, causing the band switch to be stuck. I thought "where am I ever gonna get parts for this thing?" so I passed on it. Now I regret it, of course.

73,

John, KC2UAK

Sent from my iPhone

> On Jan 11, 2016, at 8:52 AM, 'Mike Feher' n4fs@eozinc.com [regenrx] <regenrx@yahoogroups.com> wrote:
>
> Maybe someone should have a frequency stability vs. weight graph. I have a lot of those WWII German military receivers and they not only were built like a tank, they also weighed close to one. Superb craftsmanship. The small Volksemphanger is a different class altogether, and, as a receiver is really poor. That was also by design. 73 – Mike
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>
> Mike B. Feher, N4FS
>
> 89 Arnold Blvd.
>
> Howell, NJ, 07731
>
> 732-886-5960
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> From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
> Sent: Monday, January 11, 2016 6:12 AM
> To: regenrx@yahoogroups.com
> Subject: [regenrx] German Communications from WWII
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>
> German Military Comms - WWII
>
> Hello Hue, I'm posting a new topic as a result of your comment that some German receivers

used a single 'tube' in a receiver. I have an article - CQ August 1980 - that makes that point for the "Tornister b". It's a 4 "tube" 'straight' regen set. The author (Dick Rollema) wrote that "although the design is over 40 years old [writing in 1980] the set still performs remarkably. As is to be expected the set is at it's best on c.w. [...] but also on the long and medium wave broadcast band many more stations were copied than on a modern superhet."
>
> After that he comments on the performance of this set in the 40m band. "Even in Europe's extremely crowded 40m band, with it's many intruding strong broadcast stations, amateur CW signals can be easily copied at night, a test that many modern superhets fail."
>
> All that in a back-pack regen. set with 4 tubes - all the same type!
>
> I thought I should post those observations here!
>
> Les
>
>
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>
>

25618. Re[2]: [regenrx] German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-12 06:25:50 UTC
From: Hubert Miller
Topic: 25613 Message: 25618

If it was one of the ground radios produced possibly with a manufacture date of 1943, and certainly if 1944 or 1945,
the warped turret section was likely a sign of metal swelling, and you made the right decision.
BTW, the battery box for the Torn.E.b. is rarer than the receiver, and the Euro price for a battery box is now about
$800+
-Hue Miller

------ Original Message ------
From: "John jr6v6gt@... [regenrx]" <regenrx@yahoogroups.com>

Subject: Re: [regenrx] German Communications from WWII

>Hi Mike,
I remember seeing a Torn at Kutztown and being *very* impressed. This model had a turret band switch, and one section was warped, causing the band switch to be stuck. I thought "where am I ever gonna get parts for this thing?" so I passed on it. Now I regret it, of course.
73, John, KC2UAK

25619. Re[3]: [regenrx] German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-12 07:50:39 UTC
From: Hubert Miller
Topic: 25613 Message: 25619

Oops, i left out some words. I should have said, "pot-metal like alloy swelling.
I have one where the metal has swollen to such an extent that i can't get the radio out of the cabinet.
-Hue

25620. Re: Re[3]: [regenrx] German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-12 13:27:52 UTC
From: John
Topic: 25613 Message: 25620

Hi Hue,

Yes, that's exactly what it looked like to me -- a warped/swollen "pot metal" casting. But it was only one section, IIRC. So I could have sacrificed that band, I suppose. I know I'll probably never see another one, at least not reasonably priced.

John R.

Sent from my iPhone

> On Jan 12, 2016, at 2:50 AM, Hubert Miller kargo_cult@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
> Oops, i left out some words. I should have said, "pot-metal like alloy swelling.
> I have one where the metal has swollen to such an extent that i can't get the radio out of the cabinet.
> -Hue
>

25621. NRR is COMING SOON

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-12 13:51:47 UTC
From: Bry Carling
Topic: 25621 Message: 25621

A reminder to everyone - The NOVICE RIG ROUNDUP is coming February 20 - 26.

Time to start checking out your vintage CW gear from the 1950s thru 1970s and make sure it works with your key or bug!

Exchange SKCC numbers along with the usual.

There will be many homebrew tube QRP rigs running just a few watts too!

This event is listed on the SKCC Calender. You can also find complete details at:

http://NoviceRigRoundup.com

It lasts for a whole week of 24-7 fun - see you there!

73 de AF4K, Bry Carling

SKCC number 1879S

25622. RE: Re[3]: [regenrx] German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-12 14:51:50 UTC
From: Mike Feher
Topic: 25613 Message: 25622

That is indeed true with some of the German WWII receivers and I also ran across a few beyond hope. In general, however, most seem to have survived. There was also a lot of ceramic used for coil forms and even control shafts. Some were quite long and also did not survive. 73 – Mike

Mike B. Feher, N4FS

89 Arnold Blvd.

Howell, NJ, 07731

732-886-5960

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Tuesday, January 12, 2016 2:51 AM
To: regenrx@yahoogroups.com
Subject: Re[3]: [regenrx] German Communications from WWII

Oops, i left out some words. I should have said, "pot-metal like alloy swelling.

I have one where the metal has swollen to such an extent that i can't get the radio out of the cabinet.

-Hue

25623. Need to find the address of little Aubry ! The daughter of a REGENRX list member !!!

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-12 15:26:15 UTC
From: Prof. Arnaldo Coro Antich
Topic: 25623 Message: 25623

Hola amigos>
Through this wonderful list my 10 years old daughter Claudia and little 8 years old Aubry the
daughter of one of the list members started to exchange e-mail messages !
Suddenly I had a Mozilla Thunderbird crash, and the messages from Aubry vannished,
as well as the address from where they were sent...
Sorry to use the list for this purpose, but I am always thinking that we must take
good care to assure the next generations of radio hobby fans !!!
Amigo father of Aubry, please write ASAP to
arnaldo.coro@...
and a copy to
coro@...
I hope that the two girls can get in touch again... Claudia already wrote a reply to the
last e-mail received but it is not possible to send it until we recover the contact

thanks a lot
Arnie Coro
CO2KK
Host of Dxers Unlimited radio hobby program
Radio Havana Cuba

25624. RE: Re[3]: [regenrx] German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-13 21:43:50 UTC
From: les.au49@...
Topic: 25613 Message: 25624

Hello Mike,

I've never seen a German receiver - and never, ever seen one of these famous ceramic coil forms used in these sets. Is it true that the "wires" were deposited on the ceramic former by some sort of electrolytic process? How was that done. Since ceramic is an insulator, and can't act as a cathode, I can't understand this process.

I'm curious

Les

25625. Re: [regenrx] German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-14 05:02:55 UTC
From: Bill Cromwell
Topic: 25613 Message: 25625

I remember some sort of process called "sputtering" that can deposit metal on glass or ceramic but it doesn't use the glass as an electrode. I would have to look it up and learn about it all over again. And then I would probably find out that "sputtering" isn't really the process after all. Can you spell "once upon a time"?

73,

Bill KU8H

On 01/13/2016 04:43 PM, les.au49@... [regenrx] wrote:
>
> Hello Mike,
>
> I've never seen a German receiver - and never, ever seen one of these
> famous ceramic coil forms used in these sets. Is it true that the
> "wires" were deposited on the ceramic former by some sort of
> electrolytic process? How was that done. Since ceramic is an
> insulator, and can't act as a cathode, I can't understand this process.
>
> I'm curious
>
> Les
>
>

25626. Re: German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-14 13:27:33 UTC
From: b_weeber@...
Topic: 25613 Message: 25626

Here is one of these silver coated ceramic coils, it is unused.
Unfortunately it is unknown, to which transmitter/receiver it belonged.
https://groups.yahoo.com/neo/groups/regenrx/files/Exchange/silver-coil.jpg
https://groups.yahoo.com/neo/groups/regenrx/files/Exchange/silver-coil.jpg

Length of ceramic body: 66mm
Length of coil: 38mm
Diameter: 45mm
Resistance of coil: 0.83 Ohms
Inductivity: ~20µH

It looks like the complete surface has been silver coated, then afterwards they used a machine, to grind a space between the turns. Also the two connection holes are coated from the inside. A wire tap can easily be soldered anywhere on the silver coil

...Hescho also manufactured coils comprising a ceramic former onto which the silver windings were burned. The results exceeded everything known before, as relatively small short-wave oscillator coils with Q-factors exceeding 500 could now be mass-produced. Also the temperature stability figures of these coils were improved to an unprecedented height. Siemens reported coefficients of up to 200 times better than those that could be obtained from the best conventional coils so far.
Source:
http://www.noding.com/la8ak/12b.htm http://www.noding.com/la8ak/12b.htm

Best regards,
Bernd

25627. Re: [regenrx] German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-14 17:01:02 UTC
From: kevinferg@...
Topic: 25613 Message: 25627

Sputtering is correct. It is done at modest vacuum (10 microns or so, attainable with mechanical pump) levels. A target is bombarded with ionized gas, which knocks metal off the target. It flies about and sticks to most anything. It is very common in scanning electron microscopy, as the samples must be conductive. If you have ever seen an electron micrograph of a fly eye, or similar, it was first coated with metal by sputtering.

25628. Re: [regenrx] German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-14 17:25:01 UTC
From: kevinferg@...
Topic: 25613 Message: 25628

The silver might have also been applied by chemical means. A metallic salt solution (silver chloride) is applied and allowed to dry. Then it is converted to metallic silver by light exposure, or chemical or thermal means, and then the deposit would be treated in a furnace to amalgamate the discreet crystals of silver that are produced.

In any case, only a very thin layer is needed initially...once that is applied, the deposit can be built up to any desired thickness by electroplating.

25629. Re: German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-14 23:01:33 UTC
From: les.au49@...
Topic: 25613 Message: 25629

While chasing info about the question of high stability coils I found an article that dealt with the problem of stability in a different way - freezing the ceramic former and heating the winding wire as the coil was wound. By this mechanism (the author claimed) he got a VFO that was sufficiently stable to allow it to be used on 2 meters.

I can't say anything about that claim (except to say some claims about V.F.O. stability are laughable because they are patently false). I'm interested in the topic of oscillator stability, and the performance of the German sets.

Bernd, I found your photo, and "chased" the source. I ended reading pages written by PA0SE; I found his description of German WWII sets. Some (for example the Tornistor (or Tornister) were T.R.F. Others were superhets. The T.R.F. sets are always presented as workable, quiet, and (in particular) not subject to the problem of cross-modulation in the presence of "nearby" strong signals.

Here: http://www.noding.com/la8ak/12a.htm http://www.noding.com/la8ak/12a.htm

he lists the spec for a superhet, the E52 Kohn, with stability figures of 30Hz. Now THAT is impressive.
The "top" frequency is given as 25MHz.

Here: http://www.noding.com/la8ak/12b.htm http://www.noding.com/la8ak/12b.htm the second page of the article describes the development of coils:

"COILS
As already mentioned in RB65, the firm of Hescho also manufactured coils comprising a ceramic former onto which the silver windings were burned. The results exceeded everything known before, as relatively small short-wave oscillator coils with Q-factors exceeding 500 could now be mass-produced. Also the temperature stability figures of these coils were improved to an unprecedented height. Siemens reported coefficients of up to 200 times better than those that could be obtained from the best conventional coils so far."

I don't understand the word, "burned". A coil with "Q" exceeding 500 - I understand very well!

My interest is in simple superhets - this invariably demands a stable VFO (to receive SSB) and (because the set is "simple") a regenerative detector. This type of set will never perform as well as a modern commercially built superhet, but if one wants to BUILD (as opposed to operate/buy) then a well-built "Jones super" will perform well for reliable 2-way communication. V.F.O. stability and dial mechanism are the "tricky bits".

My "Jones super" will reliably hear S.S.B. on 80m from Tasmania, a distance of about 1200km. Alas, I still lack an adequately calibrated dial. My set uses a x2 FET 'cascode' mixer followed by an infinite "Z" detector. Now I want to try the same style of receiver built using "our" Prof. Coro's formula - using the 6AK5.

That's why I'm interested in German TRF sets from WWII.

Les
PS Thanks Bernd, for the photo. Tres interresant! спасибо!

25630. Re: [regenrx] Re: German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-14 23:31:04 UTC
From: Michael
Topic: 25613 Message: 25630

This is fascinating stuff!

Pre-shaving, I had various heavy German units to play with.
They were dumped in the courtyard at my father's HE college
for anyone to pick over.

Not assumed in working order, they were dismembered for useful parts.
I remember the coil formers with no winding (sic), so they were
dumped. Wail ! But I used many components in my early receivers.

Les, is the circuit of your FET Jones super on the group site?
If not, there is one small voice in the old country who would be
most interested...

Bernd, ist die Schaltung vom E52 'Köln' irgendwo downloadbar ?

Michael

25631. Re: German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-15 00:22:58 UTC
From: dulmagedon@...
Topic: 25613 Message: 25631

is "simple") a regenerative detector. This type of set will never perform as well as a modern commercially built superhet

That is simply not so. Even modern superhets with 101 transistors, ICs and computerized dinglhorphers or whatever, are relatively deaf compared to a good working regen. They are though easier to operate. In fact can be run by someone with zero relative skill level which a regen cannot and that is probably their biggest advantage. There is currently a move affoot to re-explore some of the simpler designs. And I don't mean in the hobby world either. Just because something is complicated and modern does not mean it is a better performer. Often it just means it is complicated modern and expensive. Just today during the Linc Cundall event I had a golden oppourtunity to compare a modern digital Rx against a 1930s style regen (56/58 tube). I was in QSO and lost my contact in the background noise but had my regen also on freq. I shut off the digital and flipped the B+ on on the regen. There he was beeping away. I was impressed to say the least. Eventually I did lose him anyway as the band was changing but the regen went a lot farther, measurably more then the digital could.
donVe3LYX

25632. Re: [regenrx] German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-15 22:06:06 UTC
From: Sam Neal
Topic: 25613 Message: 25632

Hello,

I have a copy of the excellent book " Radio Equipment of The Third Reich ") Palladin Press). Let me know if you need any information out of it.

73,

Sam Neal N5AF

Subject: [regenrx] German Communications from WWII

German Military Comms - WWII

Hello Hue, I'm posting a new topic as a result of your comment that some German receivers used a single 'tube' in a receiver. I have an article - CQ August 1980 - that makes that point for the "Tornister b". It's a 4 "tube" 'straight' regen set. The author (Dick Rollema) wrote that "although the design is over 40 years old [writing in 1980] the set still performs remarkably. As is to be expected the set is at it's best on c.w. [...] but also on the long and medium wave broadcast band many more stations were copied than on a modern superhet."

After that he comments on the performance of this set in the 40m band. "Even in Europe's extremely crowded 40m band, with it's many intruding strong broadcast stations, amateur CW signals can be easily copied at night, a test that many modern superhets fail."

All that in a back-pack regen. set with 4 tubes - all the same type!

I thought I should post those observations here!

Les

25633. Re: German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-15 23:08:03 UTC
From: les.au49@...
Topic: 25613 Message: 25633

Hello Don,

I am interested in the German sets because they represent an effective form of DIY communication. I have a handful of useful gear available here - Kenwood, Yaesu & co - but this represents "buy and call" technology.

I can't make any comment about the performance of (homebrew) regen sets compared with commercial rigs. I haven't made that comparison myself. However, earlier I posted the comment from 73 magazine about the performance of the German Tornistor. The impression I got from the article was that the 40 y.o. "Torn" "worked" on 40m. The problem is that we can't compare that set - made for the military by German industry - with a home-brew set. I'm not looking for competition-winning performance - I believe the measure is "do-able" and "workable". Leonard's sets are a good example of "do-able", and (I must say) following Leonard's "doings" is a lot of fun.

Even though the Torns are basic 4 tube sets only a tradesman in a well equipped workshop (lathe, metal folder, drill press and so on) would try to build such a mechanical marvel as the "Torn". And I think that makes the point very well - a good set has to be built solidly. It seems to me that we home-brewers should concentrate on mechanical construction, more than an7y particular circuit. Our sets may not be be built "like at tank", but they should have a solid chassis, and a tuning mechanism to match.

To conclude: Here (in Australia) 40m is crowded - just as everywhere - so selectivity is an important part of the specification. I've never seen figures for the selectivity of a regen. set. That makes a comparison with other sets - superhets - difficult. Ditto for cross-modulation and noise figure. If you, Don, (or anyone) has figures I'm 100% interested. 100%. Has anyone put a wobbulator near a regen set? I'd like has, or even knows how to do it, do tell me. Until figures arrive, all we can say is that regen. sets work "well enough" to be practical.

Les

25634. Re[2]: [regenrx] German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-16 01:04:37 UTC
From: Hubert Miller
Topic: 25613 Message: 25634

Take what you read about German communications equipment with some
healthy skepticism.
The Torn.E.b. for example. It's a 4-tube regn of the 1-v-2 layout using
tubes equivalent to our 1T4.
There is no way to get magic out of that combination no matter how
outstanding the mechanical
engineering.
Speaking of engineering, advanced engineering didn't prove to be the
salvation of the Reich in the
war. In fact there were numerous engineering mistakes. I was just the
other day reading a short
memoir of the North Africa campaign where a U.S. vet described much of
the German mechanical
equipment as junky or flimsy. In wartime weaponry, they actually had too
many different weapons.
The famed Tiger tank was a very expensive production and was produced in
much smaller numbers
than the mass-produced Allied tanks - and particularly the Russian tanks
which were the deadliest
challenge to the panzers. In radios, i noticed that they had too many
different tube series which
were not interchangeable. For example, backpack radios that used 2 volt
tubes and others that
used 2.4 volt tubes. Or a field radio weighing about 55 lbs. for 2 watts
output. They did build what
many call the best communications receiver of the war, the E52 and the
vhf counterpart E53, but
Hallicrafters had a SSB adapter for their SX-28, and HF-DF receivers
with instant direction display,
so the Allies weren't laggards either. There was no magic to German
communications equipment.
-Hue MIller

25638. Re: German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-16 05:42:33 UTC
From: b_weeber@...
Topic: 25613 Message: 25638

@Michael
E52 WW2 German communications receiver http://www.richardsradios.co.uk/e52btext.html

http://www.richardsradios.co.uk/e52btext.html

E52 WW2 German communications receiver http://www.richardsradios.co.uk/e52btext.html
E52b-1 "Koln" Communications receiver Ln21000-s s/n 462647

View on www.richardsradios.... http://www.richardsradios.co.uk/e52btext.html
Preview by Yahoo

together with the first link you should get a good picture about the circuit.
http://www.noding.com/la8ak/12a.htm http://www.noding.com/la8ak/12a.htm

@Les
When manufacturing ceramic, for example a cup, the material is heated up a few times after painting and coating and then slowly cooled down. If they used the sputter technology, afterwards it could have been heated up again above the melting point of silver and after some time the silver could intrude into the ceramic, to get a better mechanical stability. Heating up and cooling down very slowly over 24 hours could help to get rid of any tension in the material.

Seems, this is the original patent from 1936:
https://depatisnet.dpma.de/DepatisNet/depatisnet/DE000001395161U_all_pages.pdf?docid=DE000001395161U https://depatisnet.dpma.de/DepatisNet/depatisnet/DE000001395161U_all_pages.pdf?docid=DE000001395161U

25639. Re: German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-16 08:30:31 UTC
From: les.au49@...
Topic: 25613 Message: 25639

Hello all,

Here is the circuit very close to my Jones Superhet receiver.

https://xa.yimg.com/df/regenrx/%2BSuper-Gainer+%28cct%29.jpg?token=MMR3SpXipOOFcvzIZFG70thlRuzqygpB-7NAezmanJ8trhBcAw7dWRaC1qWAVPyzwuDzoRfuw8Z-UgXiM10nYqreY6JxfJq38vSrk152it2uEQLO-hkWOfG4iu5g1Wi7pnUsqwH3pfoULBd3cMeyHwHK1fYgGW4uhhkqnEeWeVqBOt_KxG2IL85X&type=download https://xa.yimg.com/df/regenrx/%2BSuper-Gainer+%28cct%29.jpg?token=MMR3SpXipOOFcvzIZFG70thlRuzqygpB-7NAezmanJ8trhBcAw7dWRaC1qWAVPyzwuDzoRfuw8Z-UgXiM10nYqreY6JxfJq38vSrk152it2uEQLO-hkWOfG4iu5g1Wi7pnUsqwH3pfoULBd3cMeyHwHK1fYgGW4uhhkqnEeWeVqBOt_KxG2IL85X&type=download

https://xa.yimg.com/df/regenrx/%2BSuper-Gainer+%28cct%29.jpg?token=MMR3SpXipOOFcvzIZFG70thlRuzqygpB-7NAezmanJ8trhBcAw7dWRaC1qWAVPyzwuDzoRfuw8Z-UgXiM10nYqreY6JxfJq38vSrk152it2uEQLO-hkWOfG4iu5g1Wi7pnUsqwH3pfoULBd3cMeyHwHK1fYgGW4uhhkqnEeWeVqBOt_KxG2IL85X&type=download

https://xa.yimg.com/df/regenrx/%2BSuper-Gainer+%28c... https://xa.yimg.com/df/regenrx/%2BSuper-Gainer+%28cct%29.jpg?token=MMR3SpXipOOFcvzIZFG70thlRuzqygpB-7NAezmanJ8trhBcAw7dWRaC1qWAVPyzwuDzoRfuw8Z-UgXiM10nYqreY6JxfJq38vSrk152it2uEQLO-hkWOfG4iu5g1Wi7pnUsqwH3pfoULBd3cMeyHwHK1fYgGW4uhhkqnEeWeVqBOt_KxG2IL85X&type=download

View on xa.yimg.com https://xa.yimg.com/df/regenrx/%2BSuper-Gainer+%28cct%29.jpg?token=MMR3SpXipOOFcvzIZFG70thlRuzqygpB-7NAezmanJ8trhBcAw7dWRaC1qWAVPyzwuDzoRfuw8Z-UgXiM10nYqreY6JxfJq38vSrk152it2uEQLO-hkWOfG4iu5g1Wi7pnUsqwH3pfoULBd3cMeyHwHK1fYgGW4uhhkqnEeWeVqBOt_KxG2IL85X&type=download
Preview by Yahoo

The original is found in Pat Hawker's "Radio Amateur Techniques".
I built many variations on this circuit, but always used this circuit as a starting point.
I used various "back ends" - discrete transistors, JFET + bipolar transistors, OpAmps, with & without AGC.
The regen control is very smooth - I watched the oscillations increase from a few mV (on my CRO) to 100mV or more. Very predictable, very smooth. It's a good circuit.

Les

25640. Re: [regenrx] Re: German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-16 09:29:00 UTC
From: Michael
Topic: 25613 Message: 25640

Les, I repeatedly get an error message on this link.

Any ideas?

Original in which edition of Pat Hawker's "Radio Amateur Techniques"?.

Michael

----- Original Message -----
From: les.au49@... [regenrx]
To: regenrx@yahoogroups.com
Sent: 16 January 2016 08:30
Subject: [regenrx] Re: German Communications from WWII

Hello all,

Here is the circuit very close to my Jones Superhet receiver.

https://xa.yimg.com/df/regenrx/%2BSuper-Gainer+%28cct%29.jpg?token=MMR3SpXipOOFcvzIZFG70thlRuzqygpB-7NAezmanJ8trhBcAw7dWRaC1qWAVPyzwuDzoRfuw8Z-UgXiM10nYqreY6JxfJq38vSrk152it2uEQLO-hkWOfG4iu5g1Wi7pnUsqwH3pfoULBd3cMeyHwHK1fYgGW4uhhkqnEeWeVqBOt_KxG2IL85X&type=download

https://xa.yimg.com/df/regenrx/%2BSuper-Gainer+%28c...

View on xa.yimg.com Preview by Yahoo

The original is found in I built many variations on this circuit, but always used this circuit as a
starting point.
I used various "back ends" - discrete transistors, JFET + bipolar transistors, OpAmps, with &
without AGC.
The regen control is very smooth - I watched the oscillations increase from a few mV (on my CRO) to
100mV or more. Very predictable, very smooth.&nb sp; It's a good circuit.

Les

25641. Re: German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-16 09:43:17 UTC
From: dulmagedon@...
Topic: 25613 Message: 25641

Ok fair enough. I don't personally care much about specific figures and tests. I want a set that works. I have three regens that are very practical to use. The 56/58 set is the best as it regularly outperforms the other shack sets in all areas except perhaps volume. I should build an extra Audio Am for it perhaps but it is fine with phones. It was a free build and I am as surprised as anyone how well it works. It is realatevly unbothered by hand capacity and is selective enough that it has never been a problem. And I do a lot of operating with low power one tube CW transmitters. The Linc Cundall Event is on this week, second stage tonight, and I have been using it for the Rx if choice with the TX I call Big Bertha, a 211 tube Hartley loafing along at an easy 44 watts input. It is fun running the regen with the old gear but it constantly amazes me how much better the regens hear. Instinct tells you it shouldn't be so but experience proves it time and time again. I have come to the conclusion after some 50 years of building a playing with various regens, it is the difficulty of running them that put them aside, not their lack of performance. I am very results oriented. If I can hear on the regen but not on the Digital or even my Kenwood TS830S rx and that does happen BTW, then that is better performance pure and simple. Means a lot more to me as an active ham then 40 pages of spreadsheet and a bunch of squiggly graphs. My worst rx for selectivity although I use it almost everyday is the receiver part of my No 19 Wireless set. It has "barn door" selectivity. None , not one of my regens, is as bad as it is. CW ops in crowded conditions are very difficult with it because of that. I did use it in the Linc Cundall event though Wed night. Hard to follow a signal with it though if here are many around. The digital and the regens dont have that problem. In fact especially the regens following the tone and sound of a particular signal is quite easy as they are all quite distinct from each other.
My interest in German radios stems from my heritage . My name was anglicized when my family first emigrated from Germany to Ireland then North America in the 1700s. It is supposed to be Dolmetsch not Dulmage (pronounced the same) and I know my relatives there in Germany and in Switzerland as well. One from before I was old enough to know was Fritz Dollmatsch (very early spelling but same family) who is listed as an electrical technician in Karlsruhe in the late 1800s to mid 1950s. Karlsruhe is the birthplace of radio experiments (Hertz). I often wondered if he was involved or knew Hertz. Just so we know however BOTH my parents served in the RCAF during WW2. Mom as a Flt SGT (aka "Flight Danny")(rare for a woman to attain back then) and Dad as an instructor of Wireless Mechanics at No 1 Wireless School here in Canada. I got my love of radio from my Dad I think. It was he who told me German electronics are generally very good and not to be sneezed at.
donVE3LYX

25642. Re: [regenrx] Re: German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-16 10:09:32 UTC
From: les.au49@...
Topic: 25613 Message: 25642

Hello Michael,

I'll go the longer way.
First, check the RegenRx files folder: https://groups.yahoo.com/neo/groups/regenrx/files
https://groups.yahoo.com/neo/groups/regenrx/files

Then look for "solid state regen circuits (LNS)". I think you can use control "F" to search for a folder name.
Inside that folder you'll see a "super-gainer" by GM4MTU.
I copied that from Pat Hawker's Handbook.

I can't tell the edition, but the cover is pink-ish (sort of). Maybe edition #7 or #8.
That's a wild guess.

Sometime I get an error when I past a "long" link because (somehow) a space or CR become embedded in the string. That wrecks the link.

73 to you

Les

25643. Re: [regenrx] Re: German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-16 10:19:35 UTC
From: Michael
Topic: 25613 Message: 25643

Thanks for the links, Bernd.

I am particularly curious about the variable IF filter.

I had 20+ of the RV 12P 2000, but cannot remember
what the equipment looked like. I think it was mostly vhf
as I used some of the "bits" to experiment with vhf
receivers using a Lecher-Leitung - which was useful
in determining received frequencies! Sadly most of
my stuff was disposed of when I went to work overseas :-(

Michael

----- Original Message ----- From: b_weeber

@Michael
E52 WW2 German communications receiver

E52 WW2 German communications receiver
E52b-1 "Koln" Communications receiver Ln21000-s s/n 462647
View on www.richardsradios....

25644. Re: German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-16 13:42:38 UTC
From: b_weeber@...
Topic: 25613 Message: 25644

Here is another document, which discusses this kind of variable crystal filter:
http://dc5pi.akadns.de/blogs/media/blogs/dj6ev/quarzfilter/Quarzfilter_rev1.zip
http://dc5pi.akadns.de/blogs/media/blogs/dj6ev/quarzfilter/Quarzfilter_rev1.zip
Search through the pdf for "Telefunken".

25645. RE: [regenrx] Re: German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-16 13:50:29 UTC
From: Mike Feher
Topic: 25613 Message: 25645

Wish I never would have sold my E52 along with a bunch of other German and Japanese WWII gear. But, at the time I needed the money. Regards – Mike

Mike B. Feher, N4FS

89 Arnold Blvd.

Howell, NJ, 07731

732-886-5960

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Saturday, January 16, 2016 12:43 AM
To: regenrx@yahoogroups.com
Subject: [regenrx] Re: German Communications from WWII

@Michael
E52 WW2 German communications receiver <http://www.richardsradios.co.uk/e52btext.html>

<http://www.richardsradios.co.uk/e52btext.html> image

<http://www.richardsradios.co.uk/e52btext.html> E52 WW2 German communications receiver

E52b-1 "Koln" Communications receiver Ln21000-s s/n 462647

<http://www.richardsradios.co.uk/e52btext.html> View on www.richardsradios....

Preview by Yahoo

together with the first link you should get a good picture about the circuit.
http://www.noding.com/la8ak/12a.htm

@Les
When manufacturing ceramic, for example a cup, the material is heated up a few times after painting and coating and then slowly cooled down. If they used the sputter technology, afterwards it could have been heated up again above the melting point of silver and after some time the silver could intrude into the ceramic, to get a better mechanical stability. Heating up and cooling down very slowly over 24 hours could help to get rid of any tension in the material.

Seems, this is the original patent from 1936:
https://depatisnet.dpma.de/DepatisNet/depatisnet/DE000001395161U_all_pages.pdf?docid=DE000001395161U

25646. Re: [regenrx] Re: German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-16 15:12:48 UTC
From: Michael
Topic: 25613 Message: 25646

...
Wish I never would have sold my E52 along with a bunch of other German
and Japanese WWII gear. ...

Mike B. Feher, N4FS

Amen. Wish my parents had not got rid of all my stuff...

Michael

25647. Re: [regenrx] German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-16 15:23:47 UTC
From: buzzgiles@...
Topic: 25613 Message: 25647

Maybe it's me, but $400 usd sounds a little pricey for a paperback.
Used for $140.

73 de Gary, KF9CM

25648. Re: [regenrx] Re: German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-16 15:27:58 UTC
From: Michael
Topic: 25613 Message: 25648

Super! Merci vielmals!

Michael

----- Original Message ----- From: b_weeber

Here is another document, which discusses this kind of variable crystal filter:
http://dc5pi.akadns.de/blogs/media/blogs/dj6ev/quarzfilter/Quarzfilter_rev1.zip
Search through the pdf for "Telefunken".

25649. Re[2]: [regenrx] German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-16 19:28:05 UTC
From: Hubert Miller
Topic: 25613 Message: 25649

Well, i saw pre-read copies for around $64. I do have the book, but it's "somewhere", and i have to say, it might even be worth $40 or so, new. i was underwhelmed. Large sections are simply copied from U.S. Government wartime publications. As i recall, there were mistakes, and also you can tell that the 'author' is not that familiar with radio technology.
There was a 3-volume series published in Germany in the 1970s, author Fritz Trenkle, publisher Telefunken, that covers German military radio communications systems from 1914 to 1945. These are small format, hardback books, profusely illustrated. I consider these the go-to scripture
on this equipment. A set costs around the higher figure you quote below - when they come up for sale. This set is titled "Die deutschen Funknachrichtenanlagen bis 1945". Fritsz Trenkle also authored books on non-wartime later communications systems and these books are
much more common and much lower priced.
-Hue Miller

------ Original Message ------
From: "buzzgiles@... [regenrx]" <regenrx@yahoogroups.com>
Maybe it's me, but $400 usd sounds a little pricey for a paperback.
Used for $140.
73 de Gary, KF9CM

25650. Re: German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-19 03:49:59 UTC
From: les.au49@...
Topic: 25613 Message: 25650

Hello Don,
This posting deals with the topic of specific figures and tests, and the advantages of this method.
You say, " I don't personally care much about specific figures and tests."

Somewhere on the net a Dutch "amateur" posted a series of experiments he conducted to improve the "Q" of a common tuned -LC- circuit. The experiment began with a stock standard tank circuit using a coil (wound with enameled copper wire) and capacitor (variable, stock as you see every day). The initial "Q" he measurement was in the order of 100 to 200 - I don't remember, and the starting figure doesn't matter too much. Using careful measurement, observation and logic, he increased the "Q" (Litz wire, eliminated losses & so on) to somewhere around 1000! In the end he had a different coil and capacitor; but his method is the point of this posting. On many stages the improvement he gained could ONLY be detected by measurement, not by human "estimation". Using this method over about 20 steps he brought the "Q" up to the final figure.

That is my point. When used carefully, measurement is a powerful ally. The application of basic - known - principles got our "amateur" this astonishing improvement. That's why I use quotation marks around "amateur". His approach is truly professional.

I hope to follow his method, and build a "very nice" Jones Superhet.
The first thing I need is a wobbulator.
I have already located the circuit.
I'm on the way.

Les

25651. Re: German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-19 16:56:40 UTC
From: Alex
Topic: 25613 Message: 25651

1000 Q for an LC tank circuit is impressive......amazing. Can you provide the website so that I can learn from what this person has found?Alex

25652. Re: [regenrx] Re: German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-19 18:17:00 UTC
From: Paul - on4bxz
Topic: 25613 Message: 25652

Alex,

(... Found that site easily, using search-terms in Dutch...)

That website is about crystal-receivers. (Medium Wave broadcast - 500 kHz to 1600 kHz)
Link to Main page: http://www.crystal-radio.eu/index.html

The Q-experiment is extended over 10 pages (parts 1 to 10)
Starting at : http://www.crystal-radio.eu/lctest.htm

73 - Paul, ON4BXZ

-------- Oorspronkelijk bericht --------
Van "Alex winston376@yahoo.com [regenrx]" <regenrx@yahoogroups.com>
Datum: 19-01-2016 17:56 (GMT+01:00)
Aan regenrx@yahoogroups.com
Onderwerp [regenrx] Re: German Communications from WWII

1000 Q for an LC tank circuit is impressive......amazing. Can you provide the website so that I can learn from what this person has found?
Alex

25653. Re: German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-19 18:46:39 UTC
From: dulmagedon@...
Topic: 25613 Message: 25653

Well my expression is only mine. Anyone is free to persue whatever they wish. How I came to that point is similar to what I see on sites almost weekly where someone works away calculating searching asking and two years later they almost have a radio but often it is never completed. I was back then (about 1964 or 65 getting nowhere and only adding to my confusion.)in the same boat. It was of all people my Engineer father who dragged me into the daylight. Meanwhile I learned, the same radio could be build in an afternoon or at most a day or so and any minor correction that need be could be done in an hour or so at best. However as I said that is just me and where I have landed after many years of building regens etc. It might not be a spot where anyone else want to be. Thats fine. Whatever floats ur boat.
DonVE3LYX

25654. Re: German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-21 06:07:15 UTC
From: les.au49@...
Topic: 25613 Message: 25654

Some-one from this list sent a well-thought-out e-mail suggesting a "loop" aerial on the front end of a receiver. I read the 'letter' and then lost it. (I have no idea how that happened). If you were that "some-one" - could you re-send the e-mail, please? The idea (and links) were interesting! Thanks in anticipation.

Les

25655. 7 MHz ceramic resonator regenerative receiver with no coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-22 10:47:46 UTC
From: parkerp@...
Topic: 25655 Message: 25655

You might be interested in a regen receiver based on F5LVG's in the latest Sprat but using a 7.16 MHz ceramic resonator. It covers the bottom 120kHz of 40m and is an excellent stable CW receiver. Its 3 transistors adequately drive a crystal earpiece. There are no inductors. I've previously tried VXO regens but this is by far my favourite.

I didn't do a head to head comparison but my gut reaction is that the selectivity is a little broader than an Armstrong receiver I've tried (where there's a dramatic narrowing of the bandwidth as you advance the regen control) but was able to get a very fine regen. You can set it so that CW signals above the oscillating detector are audible as tones but those that are below it are thumps. This may offer a little attenuation, or if it doesn't the thumps are less interfering than another tone.

A video demo is below.

73, Peter VK3YE

Single signal reception on a regenerative receiver. Is it possible?
https://www.youtube.com/watch?v=WREwJQVE8xI

https://www.youtube.com/watch?v=WREwJQVE8xI

Single signal reception on a regenerative receiver. Is i...
https://www.youtube.com/watch?v=WREwJQVE8xI Regenerative receivers, like simple direct conversion sets, are not known for their single signal reception. But is is possible? Watch this video and find ou...

View on www.youtube.com https://www.youtube.com/watch?v=WREwJQVE8xI
Preview by Yahoo

25656. Re: [regenrx] 7 MHz ceramic resonator regenerative receiver with no coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-22 16:23:42 UTC
From: Michael
Topic: 25655 Message: 25656

Peter, your ceramic resonator implementation looks very interesting.
I have snailband, so y'toob is mighty jittery. Is your modified F5LVG circuit
posted anywhere? Your Armstrong circuit would likewise be interesting.

Michael
UK

Original Message _____

From: parkerp@... [regenrx]

You might be interested in a regen receiver based on F5LVG's in the latest Sprat but using a 7.16
MHz ceramic resonator. It covers the bottom 120kHz of 40m and is an excellent stable CW receiver.
Its 3 transistors adequately drive a crystal earpiece. There are no inductors. I've previously
tried VXO regens but this is by far my favourite.

I didn't do a head to head comparison but my gut reaction is that the selectivity is a little
broader than an Armstrong receiver I've tried (where there's a dramatic narrowing of the bandwidth
as you advance the regen control) but was able to get a very fine regen. You can set it so that CW
signals above the oscillating detector are audible as tones but those that are below it are thumps.
This may offer a little attenuation, or if it doesn't the thumps are less interfering than another
tone.

A video demo is below.

73, Peter VK3YE

25657. Re: [regenrx] 7 MHz ceramic resonator regenerative receiver with no coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-22 17:03:25 UTC
From: Rob
Topic: 25655 Message: 25657

Definitely interested.
But I don't have the latest Sprat.... 165.....
the video says its in SPRAT 158...which I do have....
Is the latest SPRAT article...image... circuit.... exactly the same as
the SPRAT 158?
And ....
the video shows your circuit... your success with your circuit....
so can you post just your successful circuit as a JPG on REGENX ?
That would make it a lot easier then chasing the SPRATs.

On 01/22/2016 05:47 AM, parkerp@... [regenrx] wrote:
>
> You might be interested in a regen receiver based on F5LVG's in the
> latest Sprat but using a 7.16 MHz ceramic resonator. It covers the
> bottom 120kHz of 40m and is an excellent stable CW receiver. Its 3
> transistors adequately drive a crystal earpiece. There are no
> inductors. I've previously tried VXO regens but this is by far my
> favourite.
>
>
> I didn't do a head to head comparison but my gut reaction is that the
> selectivity is a little broader than an Armstrong receiver I've tried
> (where there's a dramatic narrowing of the bandwidth as you advance
> the regen control) but was able to get a very fine regen. You can set
> it so that CW signals above the oscillating detector are audible as
> tones but those that are below it are thumps. This may offer a little
> attenuation, or if it doesn't the thumps are less interfering than
> another tone.
>
>
> A video demo is below.
>
>
> 73, Peter V K3YE
>
>
>
>
> Single signal reception on a regenerative receiver. Is it possible?
> <https://www.youtube.com/watch?v=WREwJQVE8xI>
>
>
>
>

> image <https://www.youtube.com/watch?v=WREwJQVE8xI>
>
>
> Single signal reception on a regenerative receiver. Is i...
> <https://www.youtube.com/watch?v=WREwJQVE8xI>
> Regenerative receivers, like simple direct conversion sets, are not
> known for their single signal reception. But is is possible? Watch
> this video and find ou...
>
> View on www.youtube.com <https://www.youtube.com/watch?v=WREwJQVE8xI>
>
> Preview by Yahoo
>
>
>

25658. Re: [regenrx] 7 MHz ceramic resonator regenerative receiver with no coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-22 19:51:45 UTC
From: parkerp@...
Topic: 25655 Message: 25658

Thanks all. Yes, I believe the circuit in the two Sprats is the same although the later one is bigger. Luckily, as mentioned in the video, the circuit is on F5LVG's video. Link in the text description.

My comments about the Armonstrong receiver are generic and relate to any number you see on the web. Particicularly the 1-FET designs.

On this topic I'm reminded by a comment from someone (could have been Charles Kitchin) that FET regens are better for SSB while bipolar transistor regens are better for AM. This has been broadly my experience but I'm happy with the circuit presented in the video for CW-SSB reception. Though LSB reception is suboptimal as you need to advance the regen control slightly more than would be needed if the signal being received was upper sideband. That means the trick I did with CW reception is not possible with LSB.

A regen like this, maybe using a crystal rather than ceramic resonator, might be a reasonable detector for a supergainer type receiver. Although I'm reminded that gain is usually equal about the centre frequency rather than off to one side like it would be with a filtered detector. This could possibly be overcome with an xtal filter or not having the regen detector oscillating at all and using a separate local oscillator to provide the BFO action.

73, Peter VK3YE

25659. Looking for Good Solid State MW Regen Receiver Design?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-23 15:12:00 UTC
From: DASzasz@...
Topic: 25659 Message: 25659

Hello:

I am new to the list. Can anyone recommend a good MW discrete transistor starter regen design for me? Just something to "get my feet wet." Or, if you think it best to start with a design in one of the HF bands let me know. Maybe later I'd take a stab at one in the 40m or 20m regions.

BTW I built a TenTec 1253 9 band regen back in the 90's, great fun. More recent attempts at tube based "Morgan" style receivers not so much.

Many Thanks

Dave Szasz NV3F

25660. Re: [regenrx] 7 MHz ceramic resonator regenerative receiver with no coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-23 16:44:39 UTC
From: Rob
Topic: 25655 Message: 25660

Bigger?
Bigger picture or more components bigger?
But it really doesn't matter ..... especially for Michael with his
jittery y'toob on snailband......
we don't want F5FVG's circuit.... we want to see a picture of your
successful circuit.
I mail ordered some 7.16 Mhz resonators from MINIKITS.COM......
seems they are too obscure to be sold on EBAY like the 8Mhz
resonators... 150 of them for $12.
PLEASE please please post a picture of your circuit.... or email it to
me and I'll post it for you.

On 01/22/2016 02:51 PM, parkerp@... [regenrx] wrote:
>
> Thanks all. Yes, I believe the circuit in the two Sprats is the same
> although the later one is bigger. Luckily, as mentioned in the video,
> the circuit is on F5LVG's video. Link in the text description.
>
> My comments about the Armonstrong receiver are generic and relate to
> any number you see on the web. Particicularly the 1-FET designs.
>
>
> On this topic I'm reminded by a comment from someone (could have been
> Charles Kitchin) that FET regens are better for SSB while bipolar
> transistor regens are better for AM. This has been broadly my
> experience but I'm happy with the circuit presented in the video for
> CW-SSB reception. Though LSB reception is suboptimal as you need to
> advance the regen control slightly more than would be needed if the
> signal being received was upper sideband. That means the trick I did
> with CW reception is not possible with LSB.
>
> A regen like this, maybe usi ng a crystal rather than ceramic
> resonator, might be a reasonable detector for a supergainer type
> receiver. Although I'm reminded that gain is usually equal about the
> centre frequency rather than off to one side like it would be with a
> filtered detector. This could possibly be overcome with an xtal filter
> or not having the regen detector oscillating at all and using a
> separate local oscillator to provide the BFO action.
>
> 73, Peter VK3YE
>

25661. Re: 7 MHz ceramic resonator regenerative receiver with no coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-23 17:53:56 UTC
From: b_weeber@...
Topic: 25655 Message: 25661

*** I mail ordered some 7.16 Mhz resonators from MINIKITS.COM......

I found Mouser as a second source.
1: $0.237 10: $0.157 100: $0.149

25662. Re: [regenrx] Re: 7 MHz ceramic resonator regenerative receiver with no coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-23 20:51:14 UTC
From: Rob
Topic: 25655 Message: 25662

WOW cool! Thank you for the heads up.
Mouser price is half as much as what I paid MINIKITS

I had given up on MOUSER and DIGIKEY years ago when their new flashy web pages would not
navigate in my older PC browser. Too bad for them.....I spent money on EBAY instead.

It is encouraging to find Mouser price for 100 is $15.
I will probably do that with the kids
IF I EVER GET A SCHEMATIC of this elusive circuit.
Being an amateur I can't watch a video, pick out the parts, match against a SPRAT article........
I need one final successful working circuit to replicate.
But I am intrigued enough that I ordered the 7.16Mhz resonators.

01/23/2016 12:53 PM, b_weeber@... [regenrx] wrote:
>
> *** I mail ordered some 7.16 Mhz resonators from MINIKITS.COM......
>
> I found Mouser as a second source.
> 1: $0.237 10: $0.157 100: $0.149
>
>
> --
>

25663. Re: 7 MHz ceramic resonator regenerative receiver with no coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-23 21:55:29 UTC
From: b_weeber@...
Topic: 25655 Message: 25663

*** IF I EVER GET A SCHEMATIC of this elusive circuit

Rob, did you see the circuit inside the youtube video at 6:30?
https://youtu.be/WREwJQVE8xI?t=390 https://youtu.be/WREwJQVE8xI?t=390

25664. Re: [regenrx] Re: 7 MHz ceramic resonator regenerative receiver with no coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-24 01:22:13 UTC
From: Rob
Topic: 25655 Message: 25664
Attachments: 1 described; binary payloads are missing from this source WARC

THIS CIRCUIT??

On 01/23/2016 04:55 PM, b_weeber@... [regenrx] wrote:
>
> *** IF I EVER GET A SCHEMATIC of this elusive circuit
>
> Rob, did you see the circuit inside the youtube video at 6:30?
>
> https://youtu.be/WREwJQVE8xI?t=390
>
>
>
> --
>

25665. Re: [regenrx] Re: 7 MHz ceramic resonator regenerative receiver with no coils heres the image

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-24 01:31:20 UTC
From: Rob
Topic: 25655 Message: 25665

I took a screen capture and posted it on my web site here:
http://www.learnmorsecode.com/help/regen/regen.jpg

Is the circuit ?

On 01/23/2016 04:55 PM, b_weeber@... [regenrx] wrote:
>
> *** IF I EVER GET A SCHEMATIC of this elusive circuit
>
> Rob, did you see the circuit inside the youtube video at 6:30?
>
> https://youtu.be/WREwJQVE8xI?t=390
>
>
>

25666. Re: [regenrx] Re: 7 MHz ceramic resonator regenerative receiver with no coils heres the image

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-24 02:25:43 UTC
From: Rob
Topic: 25655 Message: 25666
Attachments: 2 described; binary payloads are missing from this source WARC

OK.... soooooo,,,,,,,
sorry for the confusion....
I may have it nailed down now......

I have two images here:
http://www.learnmorsecode.com/help/regen/1F5LVGregenSPART158pg23.jpg
http://www.learnmorsecode.com/help/regen/regen.jpg
which are the same as the attached images... will may disappear or not
display for some people....
so I put screen shots on LEARNMORSECODE.com just for this discussion.

My SPRAT 158... on a DVD in PDF format shows this circuit with PLUG IN
COIL and
the video shows the 7.160 fuzzy image circuit.... a lot of blue
here.... because I tried to clean up my screen
capture to fix contrast.
BUT I can not make out the values of the components in this blue image.
So I was hoping someone had a clean schematic of this circuit.... or
could take this image and RE-label
component values to readable values.

25667. Re: 7 MHz ceramic resonator regenerative receiver with no coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-24 03:31:31 UTC
From: b_weeber@...
Topic: 25655 Message: 25667

https://groups.yahoo.com/neo/groups/regenrx/files/Exchange/ceramic_resonator_regen_vk3ye.jpg https://groups.yahoo.com/neo/groups/regenrx/files/Exchange/ceramic_resonator_regen_vk3ye.jpg

25668. Re: [regenrx] Re: 7 MHz ceramic resonator regenerative receiver with no coils... PARTS LABELED!!!!

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-24 03:51:30 UTC
From: Rob
Topic: 25655 Message: 25668

THANK YOU !!!!!

On 01/23/2016 10:31 PM, b_weeber@... [regenrx] wrote:
>
> https://groups.yahoo.com/neo/groups/regenrx/files/Exchange/ceramic_resonator_regen_vk3ye.jpg
>
>

25669. Re: [regenrx] Re: 7 MHz ceramic resonator regenerative receiver with no coils... PARTS LABELED!!!!

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-24 10:23:05 UTC
From: Michael
Topic: 25655 Message: 25669

That is a great help, Bernd. Thanks!

Michael

On 01/23/2016 10:31 PM, b_weeber@... [regenrx] wrote:

https://groups.yahoo.com/neo/groups/regenrx/files/Exchange/ceramic_resonator_regen_vk3ye.jpg

25670. Adapted to 6BA6, 6C4 and 6AQ5 or EL84 it is an excellen t performing ¨modern¨ regenerative

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-24 13:19:17 UTC
From: Prof. Arnaldo Coro Antich
Topic: 25670 Message: 25670
Attachments: 1 described; binary payloads are missing from this source WARC

> http://www.w7ekb.com/glowbugs/rx/Regens/ACRegenRCA1.JPG

25671. Re: [regenrx] Adapted to 6BA6, 6C4 and 6AQ5 or EL84 it is an excellent performing ¨modern¨ regener ative [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-24 14:36:03 UTC
From: John
Topic: 25670 Message: 25671
Attachments: 1 described; binary payloads are missing from this source WARC

I recognize that -- from the back of an old RCA Receiving Tube Manual?

73,

John, KC2UAK

Sent from my iPhone

> On Jan 24, 2016, at 8:19 AM, 'Prof. Arnaldo Coro Antich' coro@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
>
>

25672. Re: [regenrx] Adapted to 6BA6, 6C4 and 6AQ5 or EL84 it is an excellent performing ¨modern¨ regenerative [1 Att achment]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-24 15:23:37 UTC
From: Prof. Arnaldo Coro Antich
Topic: 25670 Message: 25672
Attachments: 1 described; binary payloads are missing from this source WARC

Si amigo ! Yes my friend , you are absolutely right, and when built
many years ago when I was in my late teens it worked very well
indeed... Also a super-regenerative from the same period provided
my first 6 meters band amateur radio two way contact.
The audio section 6J5 - 6V6 was identical on the super-regenerative
that used a 955 acorn tube as the detector... and I also built another
one using a 6C4 detector, both mounted horizontally to make connections
as short as possible...
73 and DX
Arnie Coro
CO2KK

On 24/01/16 09:36, John jr6v6gt@... [regenrx] wrote:
>
>
> I recognize that -- from the back of an old RCA Receiving Tube Manual?
>
> 73,
>
> John, KC2UAK
>
> Sent from my iPhone
>
> On Jan 24, 2016, at 8:19 AM, 'Prof. Arnaldo Coro Antich' coro@...
> <mailto:coro@...> [regenrx] <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>> wrote:
>
>>> http://www.w7ekb.com/glowbugs/rx/Regens/ACRegenRCA1.JPG
>
>
>

25673. Re: A Simple Regen Receiver For Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-24 00:54:51 UTC
From: Suzie Creamcheeze
Topic: 25673 Message: 25673
Attachments: 4 described; binary payloads are missing from this source WARC

Greetings,

I am currently working on A Simple Regen Radio For Beginners, as described in the article Charles Kitchin wrote for the September 2000 issue of QST magazine, which available for download from the ARRL website as a PDF. I am building it using Manhattan Style Construction. This is the schematic of the circuit:

This is the layout I used, based on the schematic in the article:

This is a work-in-progress snapshot of the circuit, so far:

I am using a 39 inch long piece of 22 AWG hook-up wire as the antenna. The air variable capacitor is a 365pF. I incorporated the Fine Tuning circuit into the overall circuit. The Coil is 22 AWG solid-core hook-up wire wound around a 1.25 inch diameter pill bottle. I am using a high impedance earphone. I still need to cut out the circuit from the large copper-clad board, and also add a front panel for the knobs.

I decided to test the receiver before doing more work on it. I followed the instructions in the article to get started. At first, I thought the circuit did not work at all. So I checked the voltage points with a DMM - OK. I checked the wiring of the components - OK. The audio section - OK. I still could not hear any regeneration sound at all, nor tune in any stations.

Next, I hooked-up an oscilloscope to the circuit. I tried the 10X probe at several points, and finally got some results with the probe attached to the cathode of the germanium diode (D1). The probe ground is attached to the copper-clad board. The copper-clad board is -9V ground with the battery. With the oscilloscope attached, I could see when the oscillation started, and also hear a faint sound. Then I was able to watch the scope and adjust the Regen knob until the oscillation just stopped. Then I was able to tune in several stations, going back and forth between the Tuning, Regen, and Fine Tuning knobs. So the circuit "works".... BUT only with the scope attached to the cathode of D1. When I take the scope off the circuit, I don't hear anything except a faint hum.

Does anyone have any ideas how I can make this Regen Radio work without the scope attached to it? BTW, I am a relatively new electronics hobbyist, and the scope is brand new, so I don't know too much about how to use it. Any suggestions about where to attach the probe would be appreciated. I got into building Radio Receivers through my interest in Hobby Electronics. I bought the oscilloscope to help in building radios (instead of buying a radio). I am trying to learn as I go, My first radio receiver was a crystal

set (works really well), and this Simple Regen Radio For Beginners is my second radio.

Sincerely,
SC

P.S. This is my first post to the RegenRX Group.

25674. Re: [regenrx] Adapted to 6BA6, 6C4 and 6AQ5 or EL84 it is an excellent performing ¨modern¨ regener ative [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-24 15:56:56 UTC
From: John
Topic: 25670 Message: 25674
Attachments: 1 described; binary payloads are missing from this source WARC

Hi Arnie,

The funny thing is, once a power supply is added, the parts count is about the same as a 5-tube AA superhet!

But the regen is much more fun! ;-)

73,

John

Sent from my iPhone

> On Jan 24, 2016, at 10:23 AM, 'Prof. Arnaldo Coro Antich' coro@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
> Si amigo ! Yes my friend , you are absolutely right, and when built
> many years ago when I was in my late teens it worked very well
> indeed... Also a super-regenerative from the same period provided
> my first 6 meters band amateur radio two way contact.
> The audio section 6J5 - 6V6 was identical on the super-regenerative
> that used a 955 acorn tube as the detector... and I also built another
> one using a 6C4 detector, both mounted horizontally to make connections
> as short as possible...
> 73 and DX
> Arnie Coro
> CO2KK
>
>> On 24/01/16 09:36, John jr6v6gt@... [regenrx] wrote:
>> I recognize that -- from the back of an old RCA Receiving Tube Manual?
>>
>> 73,
>>
>> John, KC2UAK
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>> Sent from my iPhone
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>> On Jan 24, 2016, at 8:19 AM, 'Prof. Arnaldo Coro Antich' coro@... [regenrx] <regenrx@yahoogroups.com> wrote:
>>
>>>
>>>> <mime-attachment.jpg>
>
>

25675. Re: [regenrx] Re: A Simple Regen Receiver For Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-24 16:27:41 UTC
From: Michael
Topic: 25673 Message: 25675

Welcome, Suzie!

The Kitchin regen claims unusually high sensitivity for its simplicity,
but came under much scrutiny because of its floating-diode design :
the germanium diode is in effect open-ended, which in theory wouldn't work.
But evidently it does - presumably because of spurious leakage effects,
which may be why you get signals with the oscilloscope connected in.

If you have other germanium diodes to hand, try different ones.
Also check the coil and components around and including Q1,
replacing them one-by-one.
If you search Kitchin and floating-diode you will find useful info online.

Hopefully someone in the group will have tried this circuit
and be able to offer practical help.

If you do not obtain satisfactory results, try other designs in the
group pages, for example the F5FVG circuit recently referred to
in recent group postings.

Best wishes,

Michael
UK

----- Original Message -----
From: Suzie Creamcheeze creamcheeze.suzie@... [regenrx]
To: regenrx@yahoogroups.com
Sent: 24 January 2016 00:54
Subject: [regenrx] Re: A Simple Regen Receiver For Beginners

Greetings,

I am currently working on A Simple Regen Radio For Beginners, as described in the article Charles
Kitchin wrote for the September 2000 issue of QST magazine, which available for download from the
ARRL website as a PDF. I am building it using Manhattan Style Construction.

I am using a 39 inch long piece of 22 AWG hook-up wire as the antenna. The air variable capacitor is
a 365pF. I incorporated the Fine Tuning circuit into the overall circuit. The Coil is 22 AWG
solid-core hook-up wire wound around a 1.25 inch diameter pill bottle. I am using a high impedance
earphone. I still need to cut out the circuit from the large copper-clad board, and also add a front

panel for the knobs.

I decided to test the receiver before doing more work on it. I followed the instructions in the
article to get started. At first, I thought the circuit did not work at all. So I checked the
voltage points with a DMM - OK. I checked the wiring of the components - OK. The audio
section - OK.
I still could not hear any regeneration sound at all, nor tune in any stations.

Next, I hooked-up an oscilloscope to the circuit. I tried the 10X probe at several points, and
finally got some results with the probe attached to the cathode of the germanium diode (D1). The
probe ground is attached to the copper-clad board. The copper-clad board is -9V ground with the
battery. With the oscilloscope attached, I could see when the oscillation started, and also hear a
faint sound. Then I was able to watch the scope and adjust the Regen knob until the oscillation just
stopped. Then I was able to tune in several stations, going back and forth between the Tuning,
Regen, and Fine Tuning knobs. So the circuit "works".... BUT only with the scope attached to the
cathode of D1. When I take the scope off the circuit, I don't hear anything except a faint hum.

Does anyone have any ideas how I can make this Regen Radio work without the scope attached to it?
BTW, I am a relatively new electronics hobbyist, and the scope is brand new, so I don't know too
much about how to use it. Any suggestions about where to attach the probe would be appreciated. I
got into building Radio Receivers through my interest in Hobby Electronics. I bought the
oscilloscope to help in building radios (instead of buying a radio). I am trying to learn as I go,
My first radio receiver was a crystal set (works really well), and this Simple Regen Radio For
Beginners is my second radio.

Sincerely,

SC

P.S. This is my first post to the RegenRX Group.

25676. Re: [regenrx] Re: A Simple Regen Receiver For Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-24 17:16:37 UTC
From: Suzie Creamcheeze
Topic: 25673 Message: 25676
Attachments: 2 described; binary payloads are missing from this source WARC

On Sun, Jan 24, 2016 at 11:27 AM, 'Michael' michael.setaazul@...m
[regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> Welcome, Suzie!
>
> The Kitchin regen claims unusually high sensitivity for its simplicity,
> but came under much scrutiny because of its floating-diode design :
> the germanium diode is in effect open-ended, which in theory wouldn't work.
> But evidently it does - presumably because of spurious leakage effects,
> which may be why you get signals with the oscilloscope connected in.
>
> If you have other germanium diodes to hand, try different ones.
> Also check the coil and components around and including Q1,
> replacing them one-by-one.
> If you search Kitchin and floating-diode you will find useful info online.
>
> Hopefully someone in the group will have tried this circuit
> and be able to offer practical help.
>
> If you do not obtain satisfactory results, try other designs in the
> group pages, for example the F5FVG circuit recently referred to
> in recent group postings.
>
> Best wishes,
>
> Michael
> UK
>

Dear Michael,

Thank you very much for your reply. I appreciate your suggestions very much. This is my very first Regen Radio Receiver build, and I am very excited to let the Group know that I have got the Simple Regen Radio "working" _without_ the oscilloscope probe attached to it.

The "fix" for the problem this radio was having was to solder a 100pF capacitor to the cathode of the germanium diode (D1) and to the copper-clad board (the ground plane).

Now I can hear the oscillation through the earphone, adjust the Regen knob so it just stops, then use the Tuning knob (C1) and the Fine Tuning knob (R8) to tune in radio stations without the 10X probe of the oscilloscope

attached. Here is an annotated snapshot of the "fix".

There is a slight amount of 'hand capacitance' when I tune the radio, but
that should be fixed when I mount the knobs on a front panel.

This "fix" suggestion was from an Elmer named George who has a webpage about helping Boy Scouts build these Simple Regen Radios For Beginners by Charles Kitchin. He also suggested that I might try putting a 1M Ohm resistor in the same place, and also suggested shortening the leads to the Regen pot. I will try those fixes as well and see which one works the best. But for now, the 100pF capacitor WORKS. Yay !!!

This is the updated board layout, with the 100pF capacitor "fix" in place.

The next step is to construct a base and the front panel. I have some scrap pieces of Copper Roof Flashing that may be useful for the front panel.

Once again, many thanks for your suggestions.
Sincerely,
SC

>
> ----- Original Message -----
> From: Suzie Creamcheeze creamcheeze.suzie@... [regenrx]
> To: regenrx@yahoogroups.com
> Sent: 24 January 2016 00:54
> Subject: [regenrx] Re: A Simple Regen Receiver For Beginners
>
> Greetings,
>
> I am currently working on A Simple Regen Radio For Beginners, as described
> in the article Charles
> Kitchin wrote for the September 2000 issue of QST magazine, which
> available for download from the
> ARRL website as a PDF. I am building it using Manhattan Style Construction.
>
> I am using a 39 inch long piece of 22 AWG hook-up wire as the antenna. The
> air variable capacitor is
> a 365pF. I incorporated the Fine Tuning circuit into the overall circuit.
> The Coil is 22 AWG
> solid-core hook-up wire wound around a 1.25 inch diameter pill bottle. I
> am using a high impedance
> earphone. I still need to cut out the circuit from the large copper-clad
> board, and also add a front
> panel for the knobs.
>
> I decided to test the receiver before doing more work on it. I followed
> the instructions in the
> article to get started. At first, I thought the circuit did not work at
> all. So I checked the

> voltage points with a DMM - OK. I checked the wiring of the components -
> OK. The audio section - OK.
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> stations.
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> Next, I hooked-up an oscilloscope to the circuit. I tried the 10X probe at
> several points, and
> finally got some results with the probe attached to the cathode of the
> germanium diode (D1). The
> probe ground is attached to the copper-clad board. The copper-clad board
> is -9V ground with the
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> faint sound. Then I was able to watch the scope and adjust the Regen knob
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> stopped. Then I was able to tune in several stations, going back and forth
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> Regen, and Fine Tuning knobs. So the circuit "works".... BUT only with the
> scope attached to the
> cathode of D1. When I take the scope off the circuit, I don't hear
> anything except a faint hum.
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> Does anyone have any ideas how I can make this Regen Radio work without
> the scope attached to it?
> BTW, I am a relatively new electronics hobbyist, and the scope is brand
> new, so I don't know too
> much about how to use it. Any suggestions about where to attach the probe
> would be appreciated. I
> got into building Radio Receivers through my interest in Hobby
> Electronics. I bought the
> oscilloscope to help in building radios (instead of buying a radio). I am
> trying to learn as I go,
> My first radio receiver was a crystal set (works really well), and this
> Simple Regen Radio For
> Beginners is my second radio.
>
> Sincerely,
>
> SC
>
> P.S. This is my first post to the RegenRX Group.
>
>
>

25677. 1v2 Regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-24 18:30:28 UTC
From: J Ed
Topic: 25677 Message: 25677
Attachments: 1 described; binary payloads are missing from this source WARC

I'll tell you all about a receiver I built last year. I called it "Uncle Bob's Ion Snatcher" after one of the tube guys who was always there with advice for me. I ended up selling it to one of the members of the local radio club. I played with it for a while and had a little bit of fun with it but decided to move on to bigger and better things.

The receiver used two double-triodes, a 12AT7 for the RF tube and a 12AU7 for the audio tube. The first stage was a grounded-grid RF amplifier followed by a regenerative detector. The 12AU7 provided two stages of audio gain. It provided a good level of audio into headphones.

The kicker was that it ran off of a 24v supply. The filaments of the tubes were wired in series with a 10 ohm resistor. They ran a little cool and the resistor limited the amount of surge current they saw at turn-on. The plates ran from the same 24v supply. You'd be surprised what tubes can do with just a little voltage.

My radio's output stage used a 70v line transformer for the output. These are usually not good for more than a watt of output when used as an output transformer. Why? I'm not sure, as I've used the in setups where the idle current of the tube was isolated from the transformer primary. Nonetheless, it made an excellent output transformer for the radio.

The coils were made using octal bases with PVC pipes glued inside of them. The PVC bore the wiring of the coil and the base...well...you get the idea. It worked very well on the AM band and I remember hearing AM operators on either 160 or 80 meters using a 15 foot length of speaker wire as the antenna.

Here's the video I took when I finished making the thing.

https://www.youtube.com/watch?v=abF9wm42C90

Anyone who wants to build one can feel free. Do it. Do it now.
Ed AE7TE

25678. Re: Looking for Good Solid State MW Regen Receiver Design?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-24 18:54:52 UTC
From: parkerp@...
Topic: 25659 Message: 25678

Dave - it's simple but this has worked well for me, receiving stations hundreds of km away. Article, circuit and YouTube demo on my website at:
http://home.alphalink.com.au/~parkerp/gateway/nonov99.htm
http://home.alphalink.com.au/~parkerp/gateway/nonov99.htm

Peter VK3YE

25679. Re: [regenrx] Adapted to 6BA6, 6C4 and 6AQ5 or EL84 it is an excellent performing ¨modern¨ regenerative [1 Att achment]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-24 20:56:36 UTC
From: Prof. Arnaldo Coro Antich
Topic: 25670 Message: 25679

Sure amigo ! And the reliability of the time proven tubes circuits is
certainly
much higher than solid state devices...
I have tested and operated recently vacuum tubes made in 1935 and they
provided
perfect performance.... very well built RCA original tubes... also tested
Soviet made tubes that date back to 1945, also working very well, no
problems
with complex semiconductor materials migrating and spoiling the performance
in a very hard to understand way...
An 807 tube used on my 1959 first amateur transmitter is still in like new
condition, measuring the same transconductance after more than half
a century.... As a comparison with solid state devices... a very nice
looking
solid state rig has died due to what a local electronics guru describes as
contamination of the inner guts of the transistors possible caused by
defective
manufacturing processes !!! Transistors are not plug in, and changing
all of them
seems to be an unbearable challenge !!!
Also, my regeneratives made with vacuum tubes can operate with rather
low DC plate and screen grid voltages...like 24/48 volts , and still provide
excellent performance....
Finally.... your comment
¨ But the regen is much more fun¨ is absolutely true amigo John
73 and DX
Arnie Coro
CO2KK

On 24/01/16 10:56, John jr6v6gt@... [regenrx] wrote:
>
>
> Hi Arnie,
>
> The funny thing is, once a power supply is added, the parts count is
> about the same as a 5-tube AA superhet!
>
> But the regen is much more fun! ;-)
>
> 73,
>
> John
>
> Sent from my iPhone

>
> On Jan 24, 2016, at 10:23 AM, 'Prof. Arnaldo Coro Antich' coro@...
> <mailto:coro@...> [regenrx] <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>> wrote:
>
>> Si amigo ! Yes my friend , you are absolutely right, and when built
>> many years ago when I was in my late teens it worked very well
>> indeed... Also a super-regenerative from the same period provided
>> my first 6 meters band amateur radio two way contact.
>> The audio section 6J5 - 6V6 was identical on the super-regenerative
>> that used a 955 acorn tube as the detector... and I also built another
>> one using a 6C4 detector, both mounted horizontally to make connections
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>> 73 and DX
>> Arnie Coro
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>>> I recognize that -- from the back of an old RCA Receiving Tube Manual?
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>>> 73,
>>>
>>> John, KC2UAK
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>>> On Jan 24, 2016, at 8:19 AM, 'Prof. Arnaldo Coro Antich'
>>> coro@... [regenrx] <regenrx@yahoogroups.com
>>> <mailto:regenrx@yahoogroups.com>> wrote:
>>>
>>>>> <mime-attachment.jpg>
>>
>
>
>

25680. Re: [regenrx] RE: Adapted to 6BA6, 6C4 and 6AQ5 or EL84 it ----- modern transformers specifications

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-24 21:43:45 UTC
From: Rob
Topic: 25670 Message: 25680
Attachments: 1 described; binary payloads are missing from this source WARC

Is there any standard definition of T1 and T2 specifications?

When you guys see a schematic like this that calls for these two
standard parts:

T1=RF coil of the 4 prong ,plug in type for use with a 140-uuf tuning
capacitor
and
T2=Regenerative detector coil of the 5-prong, 2-winding, plug-in type
with tapped grid winding for electron-coupled circuit

WHAT do you use for these transformers?
WHAT specification would I need to define... to buy or build or measure
these two transformers?

On 01/24/2016 08:19 AM, 'Prof. Arnaldo Coro Antich' coro@...
[regenrx] wrote:
>
>> http://www.w7ekb.com/glowbugs/rx/Regens/ACRegenRCA1.JPG
>

25681. Re: [regenrx] Re: A Simple Regen Receiver For Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-24 21:49:07 UTC
From: Michael
Topic: 25673 Message: 25681

That is good news! Lots of ideas and advice are always available, as you know. There was an error
in the September 2000 QST schematic you followed. The QST article labels R3 as 1k, later versions
suggest 100k for R3, so you might like to try that, with the added 100pF removed. This 100pF might
reduce the sensitivity, so it would be worth experimenting further with, if still necesssary, a 1M
to100k resistor instead, as George suggests. When it is working to your satisfaction, it could be
rebuilt with all the ground points in one place and rigid, short wiring used in the RF section.

Michael

----- Original Message ----- From: Suzie Creamcheeze

Thank you very much for your reply. I appreciate your suggestions very much. This is my very first
Regen Radio Receiver build, and I am very excited to let the Group know that I have got the Simple
Regen Radio "working" _without_ the oscilloscope probe attached to it.

The "fix" for the problem this radio was having was to solder a 100pF capacitor to the cathode of
the germanium diode (D1) and to the copper-clad board (the ground plane).

Now I can hear the oscillation through the earphone, adjust the Regen knob so it just stops, then
use the Tuning knob (C1) and the Fine Tuning knob (R8) to tune in radio stations without the 10X
probe of the oscilloscope attached. Here is an annotated snapshot of the "fix".

There is a slight amount of 'hand capacitance' when I tune the radio, but that should be fixed when
I mount the knobs on a front panel.

This "fix" suggestion was from an Elmer named George who has a webpage about helping Boy Scouts
build these Simple Regen Radios For Beginners by Charles Kitchin. He also suggested that I might try
putting a 1M Ohm resistor in the same place, and also suggested shortening the leads to the Regen
pot. I will try those fixes as well and see which one works the best. But for now, the 100pF
capacitor WORKS. Yay !!!

25682. Re: [regenrx] Re: A Simple Regen Receiver For Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-24 22:56:49 UTC
From: Suzie Creamcheeze
Topic: 25673 Message: 25682
Attachments: 1 described; binary payloads are missing from this source WARC

Dear Michael,

Thank you very much for your reply. I have not seen the errata for the September 2000 QST article. I originally downloaded a copy of the article from the ARRL website.

I can try replacing the 1K R3 with a 100K resistor and see what happens. Now that the receiver is working without having an oscilloscope probe attached to it, I can try just about anything. This is all a learning experience for me.

I am going to go ahead and begin construction of a Front Panel. I have heard that when the knobs are installed on a Front Panel, there is less 'hand capacitance' when tuning the receiver.

One thing is certain, I am definitely going to be building more of these Regen Receivers. I think they are a lot of fun. Here is a first design for a Front Panel for my Regen Radio.

The radio circuit will be mounted on the wood block with standoffs. The Copper Roof Flashing will be attached to the wood block with brass wood screws. I will solder a wire connection from the circuit board to the Front Panel. I can make some one-half-inch tabs on three sides of the Copper Roof Flashing to add rigidity if needed.

Regards,
SC

25683. Re: 7 MHz ceramic resonator regenerative receiver with no coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-25 10:06:50 UTC
From: b_weeber@...
Topic: 25655 Message: 25683

Welcome!

25685. Re: [regenrx] RE: Adapted to 6BA6, 6C4 and 6AQ5 or EL84 it ----- modern transformers specifications

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-25 20:42:42 UTC
From: John
Topic: 25670 Message: 25685
Attachments: 1 described; binary payloads are missing from this source WARC

Good question! I know Hammarlund made ready-wound 4-pin coils that would cover approximately AM BC band thru 20 meters. They also made 6-pin versions covering the same range. But I'm not sure about 5-pin for ECO.

I recommend the Lindsay reprints of the Hammarlund shortwave manual, or the Gernsback little yellow booklets, or an old ARRL Handbook (40s or 50s is best).

Those publications should give you some pretty good ideas about windings.

There are small differences between Arnie's schematic and the one I have in RCA RTM RC-14. Arnie's is probably a little later, and uses a 6K6. RC-14 has a 6F6 and different spec for output transformer, and does not define the two RF transformers at all. Not very user-friendly. I agree that coil-winding info should have been provided.

Regards,

John

Sent from my iPhone

> On Jan 24, 2016, at 4:43 PM, Rob roomberg@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
> Is there any standard definition of T1 and T2 specifications?
>
> When you guys see a schematic like this that calls for these two standard parts:
>
> T1=RF coil of the 4 prong ,plug in type for use with a 140-uuf tuning capacitor
> and
> T2=Regenerative detector coil of the 5-prong, 2-winding, plug-in type with tapped grid winding for electron-coupled circuit
>
> WHAT do you use for these transformers?
> WHAT specification would I need to define... to buy or build or measure these two transformers?
>
>
>
>> On 01/24/2016 08:19 AM, 'Prof. Arnaldo Coro Antich' coro@... [regenrx] wrote:
>>
>
>

25687. Re: [regenrx] RE: Adapted to 6BA6, 6C4 and 6AQ5 or EL84 it ----- modern transformers specifications

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-25 21:03:47 UTC
From: Rob
Topic: 25670 Message: 25687

I don't have any Lindsay Hmammarlund shortwave manual reprints or
Gernsback little yellow booklets
YET
but I definitely have 40 and 50 ARRL handbooks on PDF.
Got any particular year that you would have me go fetch because you
liked that book more than others?

On 01/25/2016 03:42 PM, John jr6v6gt@... [regenrx] wrote:
> Good question! I know Hammarlund made ready-wound 4-pin coils that
> would cover approximately AM BC band thru 20 meters. They also made
> 6-pin versions covering the same range. But I'm not sure about 5-pin
> for ECO.
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> I recommend the Lindsay reprints of the Hammarlund shortwave manual,
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> 6K6. RC-14 has a 6F6 and different spec for output transformer, and
> does not define the two RF transformers at all. Not very
> user-friendly. I agree that coil-winding info should have been provided.
>
> Regards,
>
> John
>

25689. Re: Would you buy these tubes??

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-26 00:53:05 UTC
From: winston376@...
Topic: 25684 Message: 25689

Spray some WD-40 inside and the electrons will run faster...

A

25690. Re: [regenrx] RE: Adapted to 6BA6, 6C4 and 6AQ5 or EL84 it ----- modern transformers specifications

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-26 05:25:19 UTC
From: John
Topic: 25670 Message: 25690

Sure. Try 1942 or 43, and also '37 if you have those. I'm looking at actual HB's I have on hand. The only ones I have in CD are the 50's. I looked at '56 but that regen uses modified transmitter coils that might be hard to find, and gives no winding data.

Also, do some internet searching and I'm sure you'll find plenty of tube regen projects with coil winding data that are similar to the RCA tube manual schematic.

For a long time I have wanted to build a regen with a tuned RF stage, and this will probably be it. If it's good enough for Arnie, it's good enough for me!

Regards,

John

Sent from my iPhone

> On Jan 25, 2016, at 4:03 PM, Rob roomberg@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
> I don't have any Lindsay Hmammarlund shortwave manual reprints or
> Gernsback little yellow booklets
> YET
> but I definitely have 40 and 50 ARRL handbooks on PDF.
> Got any particular year that you would have me go fetch because you
> liked that book more than others?
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> On 01/25/2016 03:42 PM, John jr6v6gt@... [regenrx] wrote:
> > Good question! I know Hammarlund made ready-wound 4-pin coils that
> > would cover approximately AM BC band thru 20 meters. They also made
> > 6-pin versions covering the same range. But I'm not sure about 5-pin
> > for ECO.
> >
> > I recommend the Lindsay reprints of the Hammarlund shortwave manual,
> > or the Gernsback little yellow booklets, or an old ARRL Handbook (40s
> > or 50s is best).
> >
> > Those publications should give you some pretty good ideas about windings.
> >
> > There are small differences between Arnie's schematic and the one I
> > have in RCA RTM RC-14. Arnie's is probably a little later, and uses a
> > 6K6. RC-14 has a 6F6 and different spec for output transformer, and
> > does not define the two RF transformers at all. Not very
> > user-friendly. I agree that coil-winding info should have been provided.
> >
> > Regards,
> >

> > John
> >
>
>

25691. Re: [regenrx] RE: Adapted to 6BA6, 6C4 and 6AQ5 or EL84 it ----- modern transformers specifications ...bakelite tube

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-26 07:30:31 UTC
From: Rob
Topic: 25670 Message: 25691
Attachments: 1 described; binary payloads are missing from this source WARC

I don't know what GERNSBACK little yellow books were....
but I found RADIO-CRAFT 1929-07 pdf on
http://www.americanradiohistory.com/Radio_Craft_Master_Page_Guide.htm

which shows a schematic with the description under UNIT DETAILS saying
primary 10 windings and secondary
125 windings over 1 and 1 half inch closely threaded bakelite tube.

Very simple to follow instructions.....
so I was wondering if it was worth replicating over pill bottles or film
canisters.

So what are the little yellow books? Are they on americanradiohistory?
Do they explain how to calculate
these coils?

On 01/25/2016 03:42 PM, John jr6v6gt@... [regenrx] wrote:
> Good question! I know Hammarlund made ready-wound 4-pin coils that
> would cover approximately AM BC band thru 20 meters. They also made
> 6-pin versions covering the same range. But I'm not sure about 5-pin
> for ECO.
>
> I recommend the Lindsay reprints of the Hammarlund shortwave manual,
> or the Gernsback little yellow booklets, or an old ARRL Handbook (40s
> or 50s is best).
>
> Those publications should give you some pretty good ideas about windings.
>
> There are small differences between Arnie's schematic and the one I
> have in RCA RTM RC-14. Arnie's is probably a little later, and uses a
> 6K6. RC-14 has a 6F6 and different spec for output transformer, and
> does not define the two RF transformers at all. Not very
> user-friendly. I agree that coil-winding info should have been provided.
>
> Regards,
>
> John
>
> Sent from my iPhone
>

25692. Re: 7 MHz ceramic resonator regenerative receiver with no coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-26 10:30:38 UTC
From: parkerp@...
Topic: 25655 Message: 25692

A 1w CW transmitter section has been added so that the thing becomes a frequency agile transmitter-receiver. It is independently tunable so you can have split frequency or any offset you want.

Video with circuit, demo (and cat) is here: Ceramic Resonator Regenerative Transmitter - Receiver for 7 MHz CW https://www.youtube.com/watch?v=GJBRIf5Xkzw

https://www.youtube.com/watch?v=GJBRIf5Xkzw

Ceramic Resonator Regenerative Transmitter -...
https://www.youtube.com/watch?v=GJBRIf5Xkzw Building on the ceramic resonator regenerative receiver recently described this transmitter-receiver uses a 7.160 MHz ceramic resonator in a companio...

View on www.youtube.com https://www.youtube.com/watch?v=GJBRIf5Xkzw
Preview by Yahoo

73, Peter VK3YE

25693. Re: [regenrx] RE: Adapted to 6BA6, 6C4 and 6AQ5 or EL84 it ----- modern transformers specifications ...bakelite tube [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-26 14:27:41 UTC
From: John
Topic: 25670 Message: 25693

The Gernsback "Educational Library" booklets were designed for beginners. I don't think there is info in them on *calculating* windings. But they do have winding data for the various sets. Vintage ARRL HBs should be a good reference for calculating windings.

I think you have an excellent idea to use pill bottles as coil forms. Back in the day it was easy to go to the local radio store and buy ready-made coils, or empty forms. Not anymore. Keep an eye out for vintage coils and/or forms on eBay or at local hamfests and antique radio meets (if you're near any of those). Coils and forms do turn up sometimes.

John R.

Sent from my iPhone

> On Jan 26, 2016, at 2:30 AM, Rob roomberg@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
> I don't know what GERNSBACK little yellow books were....
> but I found RADIO-CRAFT 1929-07 pdf on
> http://www.americanradiohistory.com/Radio_Craft_Master_Page_Guide.htm
>
> which shows a schematic with the description under UNIT DETAILS saying
> primary 10 windings and secondary
> 125 windings over 1 and 1 half inch closely threaded bakelite tube.
>
> Very simple to follow instructions.....
> so I was wondering if it was worth replicating over pill bottles or film
> canisters.
>
> So what are the little yellow books? Are they on americanradiohistory?
> Do they explain how to calculate
> these coils?
>
> On 01/25/2016 03:42 PM, John jr6v6gt@... [regenrx] wrote:
> > Good question! I know Hammarlund made ready-wound 4-pin coils that
> > would cover approximately AM BC band thru 20 meters. They also made
> > 6-pin versions covering the same range. But I'm not sure about 5-pin
> > for ECO.
> >
> > I recommend the Lindsay reprints of the Hammarlund shortwave manual,
> > or the Gernsback little yellow booklets, or an old ARRL Handbook (40s
> > or 50s is best).
> >
> > Those publications should give you some pretty good ideas about windings.
> >
> > There are small differences between Arnie's schematic and the one I
> > have in RCA RTM RC-14. Arnie's is probably a little later, and uses a

> > 6K6. RC-14 has a 6F6 and different spec for output transformer, and
> > does not define the two RF transformers at all. Not very
> > user-friendly. I agree that coil-winding info should have been provided.
> >
> > Regards,
> >
> > John
> >
> > Sent from my iPhone
> >
>
>
> <rftransformersSG10b.jpg>

25694. Re: [regenrx] RE: Adapted to 6BA6, 6C4 and 6AQ5 or EL84 it ----- modern transformers specifications ...bakelite tube

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-26 15:09:29 UTC
From: Bill Cromwell
Topic: 25670 Message: 25694

Hi,

I have seen published reports from people who have the equipment and the patience to measure the performance of the hard plastic pill bottles as coil forms and they are excellent. For plug-in applications they can be fastened to tube bases or can be used in bandswitched or single-band radios.

73,

Bill KU8H

On 01/26/2016 09:27 AM, John jr6v6gt@... [regenrx] wrote:
> The Gernsback "Educational Library" booklets were designed for
> beginners. I don't think there is info in them on *calculating*
> windings. But they do have winding data for the various sets. Vintage
> ARRL HBs should be a good reference for calculating windings.
>
> I think you have an excellent idea to use pill bottles as coil forms.
> Back in the day it was easy to go to the local radio store and buy
> ready-made coils, or empty forms. Not anymore. Keep an eye out for
> vintage coils and/or forms on eBay or at local hamfests and antique
> radio meets (if you're near any of those). Coils and forms do turn up
> sometimes.
>
> John R.
>

25695. Re: [regenrx] Re: 7 MHz ceramic resonator regenerative receiver with no coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-26 16:15:54 UTC
From: Rob
Topic: 25655 Message: 25695

VERY NICE CLEAR circuit images in the video.... THANKYOU!!!

On 01/26/2016 05:30 AM, parkerp@... [regenrx] wrote:
> A 1w CW transmitter section has been added so that the thing becomes a
> frequency agile transmitter-receiver. It is independently tunable so
> you can have split frequency or any offset you want.
>
> Video with circuit, demo (and cat) is here: Ceramic Resonator
> Regenerative Transmitter - Receiver for 7 MHz CW
> <https://www.youtube.com/watch?v=GJBRIf5Xkzw>

25696. Subscribing

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-26 23:30:32 UTC
From: Jim Wiley
Topic: 25696 Message: 25696

I need to tell a friend how to subscribe to this list. Any help out there?

- Jim,. KL7CC

25697. Re: [regenrx] Subscribing

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-27 00:15:25 UTC
From: Will
Topic: 25696 Message: 25697

If you look at the bottom of your message there is a link

Visit Your Group

https://groups.yahoo.com/neo/groups/regenrx/

That takes you to the group website and you can request membership there.

Cheers,
Will

On 27/01/16 12:30, Jim Wiley jwiley@... [regenrx] wrote:
>
>
> I need to tell a friend how to subscribe to this list. Any help out
> there?
>
> - Jim,. KL7CC
>
>

25698. Re: [regenrx] Subscribing

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-27 00:20:57 UTC
From: Jim Wiley
Topic: 25696 Message: 25698

Actually, that link comes back with : Error 404, page not found.

It then says wait a few seconds, for a new page, but that new page has
nothing obvious about how to subscribe to the list.

- Jim

On 1/26/2016 3:15 PM, Will zl1tao@... [regenrx] wrote:
> If you look at the bottom of your message there is a link
>
> Visit Your Group
>
> https://groups.yahoo.com/neo/groups/regenrx/
>
>
> That takes you to the group website and you can request membership there.
>
> Cheers,
> Will
>
>
>
>
> On 27/01/16 12:30, Jim Wiley jwiley@... [regenrx] wrote:
>>
>>
>> I need to tell a friend how to subscribe to this list. Any help out
>> there?
>>
>> - Jim,. KL7CC
>>
>>
>
> ------------------------------------
>
> ------------------------------------
>
> "In the interest of Regenerating radio's lost art of Regeneration"
> ------------------------------------
>
> Yahoo Groups Links
>
>
>
>

25699. Re: [regenrx] Subscribing

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-27 01:18:56 UTC
From: Will
Topic: 25696 Message: 25699

Apologies, it lost the last bit

https://groups.yahoo.com/neo/groups/regenrx/info

Will

On 27/01/16 13:20, Jim Wiley jwiley@... [regenrx] wrote:
>
>
> Actually, that link comes back with : Error 404, page not found.
>
> It then says wait a few seconds, for a new page, but that new page has
> nothing obvious about how to subscribe to the list.
>
>
> - Jim
>
>
> On 1/26/2016 3:15 PM, Will zl1tao@... [regenrx] wrote:
>> If you look at the bottom of your message there is a link
>>
>> Visit Your Group
>>
>> https://groups.yahoo.com/neo/groups/regenrx/
>>
>>
>> That takes you to the group website and you can request membership there.
>>
>> Cheers,
>> Will
>>
>>
>>
>>
>> On 27/01/16 12:30, Jim Wiley jwiley@... [regenrx] wrote:
>>>
>>>
>>> I need to tell a friend how to subscribe to this list. Any help out
>>> there?
>>>
>>> - Jim,. KL7CC
>>>
>>>
>>
>> ------------------------------------
>>

>> ------------------------------------
>>
>> "In the interest of Regenerating radio's lost art of Regeneration"
>> ------------------------------------
>>
>> Yahoo Groups Links
>>
>>
>>
>>
>
>

25700. Re: 7 MHz ceramic resonator regenerative receiver with no coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-27 12:00:28 UTC
From: qrper723@...
Topic: 25655 Message: 25700

Hi,
Very interesting transceiver!
It's a new idea without normal VXO or VFO.

And I'd like to make this "Clone" but there is no supplier to sell this ceramic resonator of 7.16MHz in Japan area. It is made by "MURATA" that is Japanese famous component company but we can "NOT" get from my own area. This is really contradiction. hi...

OK you said ... the Australian seller sell it at cheap but the shipping cost is expensive. It's about ten times of the resonator cost. This is also a contradiction isn't it?

I have a ceramic resonator of 3.58MHz in my junk box so I make a doubler using this as an 40m external oscillator circuit and connect your circui. But I don't have a confidence this will work or not.

Do you have any idea about this?

ja9mat Hidehiko.

---In regenrx@yahoogroups.com, <roomberg@...> wrote :

VERY NICE CLEAR circuit images in the video.... THANKYOU!!!

On 01/26/2016 05:30 AM, parkerp@... mailto:parkerp@... [regenrx] wrote:

A 1w CW transmitter section has been added so that the thing becomes a frequency agile transmitter-receiver. It is independently tunable so you can have split frequency or any offset you want.

Video with circuit, demo (and cat) is here: Ceramic Resonator Regenerative Transmitter - Receiver for 7 MHz CW

25701. Re: 7 MHz ceramic resonator regenerative receiver with no coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-27 14:54:15 UTC
From: Bry Carling
Topic: 25655 Message: 25701

Do you have any idea WHERE to find those 7.160 MHz ceramic resonators today??

Bry AF4K
>>Posted by: "Rob" roomberg@... kb3byt
>>Date: Tue Jan 26, 2016 8:15 am ((PST))

>>VERY NICE CLEAR circuit images in the video.... THANKYOU!!!

On 01/26/2016 05:30 AM, parkerp@... [regenrx] wrote:
> A 1w CW transmitter section has been added so that the thing becomes a
> frequency agile transmitter-receiver. It is independently tunable so
> you can have split frequency or any offset you want.
>
> Video with circuit, demo (and cat) is here: Ceramic Resonator
> Regenerative Transmitter - Receiver for 7 MHz CW
> <https://www.youtube.com/watch?v=GJBRIf5Xkzw>

25702. Re: [regenrx] Re: 7 MHz ceramic resonator regenerative receiver with no coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-27 15:54:16 UTC
From: Rob
Topic: 25655 Message: 25702

mouser.com

On 01/27/2016 09:54 AM, Bry Carling af4k@... [regenrx] wrote:
>
> Do you have any idea WHERE to find those 7.160 MHz ceramic resonators
> today??
>
> Bry AF4K
>
> >>Posted by: "Rob" roomberg@... kb3byt
> >>Date: Tue Jan 26, 2016 8:15 am ((PST))
>
> >>VERY NICE CLEAR circuit images in the video.... THANKYOU!!!
>
> On 01/26/2016 05:30 AM, parkerp@... [regenrx] wrote:
> > A 1w CW transmitter section has been added so that the thing becomes a
> > frequency agile transmitter-receiver. It is independently tunable so
> > you can have split frequency or any offset you want.
> >
> > Video with circuit, demo (and cat) is here: Ceramic Resonator
> > Regenerative Transmitter - Receiver for 7 MHz CW
> > <https://www.youtube.com/watch?v=GJBRIf5Xkzw>
>

25703. Re: [regenrx] Re: 7 MHz ceramic resonators for fun

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-27 18:00:16 UTC
From: Rob
Topic: 25655 Message: 25703

I just got a package from MOUSER with 100 of these 7.16 resonators.

I would share some of these with you guys asking where to find them.
Send me your postal address.

On 01/27/2016 10:54 AM, Rob wrote:
> mouser.com
>
>
>
> On 01/27/2016 09:54 AM, Bry Carling af4k@... [regenrx] wrote:
>>
>> Do you have any idea WHERE to find those 7.160 MHz ceramic resonators
>> today??
>>
>> Bry AF4K
>>
>> >>Posted by: "Rob"roomberg@... kb3byt
>> >>Date: Tue Jan 26, 2016 8:15 am ((PST))
>>
>> >>VERY NICE CLEAR circuit images in the video.... THANKYOU!!!
>>
>> On 01/26/2016 05:30 AM,parkerp@... [regenrx] wrote:
>> > A 1w CW transmitter section has been added so that the thing becomes a
>> > frequency agile transmitter-receiver. It is independently tunable so
>> > you can have split frequency or any offset you want.
>> >
>> > Video with circuit, demo (and cat) is here: Ceramic Resonator
>> > Regenerative Transmitter - Receiver for 7 MHz CW
>> > <https://www.youtube.com/watch?v=GJBRIf5Xkzw>
>>
>

25704. 7 MHz ceramic resonators

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-28 18:41:28 UTC
From: Rob
Topic: 25655 Message: 25704

7.16 resonators are in the mail for
W8GXU
AF4K
AC2Q

PLEASE Post pictures of anything you guys build.
Especially schematics if you change them.

25705. OT triac replacement driver transistor

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-28 19:14:05 UTC
From: Rob
Topic: 25655 Message: 25705
Attachments: 1 described; binary payloads are missing from this source WARC

I found this TRIAC driver circuit on the web.
I wanted to replace the TIC206 triac with BTA25 triac.... just cuz I
have BTA25 triacs now.
Is that OK to do in this circuit?

It specifies a 2SB328 PNP transistor.
I can't find any 2SB328 PNP transistors on the web.
Can anyone recommend a replacement for this 2SB328 ?

archived here for discussion:
http://www.learnmorsecode.com/help/triac/index.html

25706. RE: [regenrx] OT triac replacement driver transistor [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-28 20:32:26 UTC
From: Larry
Topic: 25655 Message: 25706

Rob, just about any triac or transistor will work. Check your Triac for cold triggering current. A sensitive triac would be nice. Triacs and SCRs have problems when temperature drops below zero. Transistor would be 2N2222A or such.

Go for it! I have built a lot of triac and SCR circuits. I really prefer SCR circuits as the SCR is a more rugged device. A Triac can fail half wave. Not good if driving a transformer. But an SCR and a full wave bridge are extremely rugged. And won’t fail half wave, assuming your parameters are properly chosen.

Larry

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Thursday, January 28, 2016 2:14 PM
To: regenrx@yahoogroups.com
Subject: [regenrx] OT triac replacement driver transistor [1 Attachment]

I found this TRIAC driver circuit on the web.
I wanted to replace the TIC206 triac with BTA25 triac.... just cuz I
have BTA25 triacs now.
Is that OK to do in this circuit?

It specifies a 2SB328 PNP transistor.
I can't find any 2SB328 PNP transistors on the web.
Can anyone recommend a replacement for this 2SB328 ?

archived here for discussion:
http://www.learnmorsecode.com/help/triac/index.html

25707. Re: 7 MHz ceramic resonators

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-28 21:14:29 UTC
From: qrper723@...
Topic: 25655 Message: 25707

Hello Rob.

I see you are sharing your stock of 7.16MHz ceramic resonator.
If you could would you please share for me? I want 4 pieces of resonator for regenerative transceiver and the other homebrew project.
Please let me know the cost including the shipping.

I can pay via PayPal.

Thanks for your support.

JA9MAT Hidehiko.

25708. RE: [regenrx] OT triac replacement driver transistor [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-28 21:23:07 UTC
From: kevinferg@...
Topic: 25655 Message: 25708

Not sure on the triac substitution, but if it will stand the voltage and current, it should work fine.

I did notice that when you asked about transistor substitution, you specified PNP. That circuit is designed for a NPN transistor jast as is drawn. The Zener and ballast cap create a negative supply, so the top rail is negative and the lower rail positive...opposite the way such things are usually drawn. So be sure to follow the schematic with regard to cap and diode polarity, it is correct. The transistor only sees the 15V supply as limited by the zener diode, so a 2n2222 should work fine.

25709. Re: [regenrx] Re: 7 MHz ceramic resonators

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-29 05:44:52 UTC
From: Rob
Topic: 25655 Message: 25709

No cost.
Just give me your mailing address.

On 01/28/2016 04:14 PM, qrper723@... [regenrx] wrote:
>
> Hello Rob.
>
> I see you are sharing your stock of 7.16MHz ceramic resonator.
> If you could would you please share for me? I want 4 pieces of
> resonator for regenerative transceiver and the other homebrew project.
> Please let me know the cost including the shipping.
>
> I can pay via PayPal.
>
> Thanks for your support.
>
> JA9MAT Hidehiko.
>
>

25710. Re: [regenrx] Re: 7 MHz ceramic resonators

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-29 05:56:52 UTC
From: J Ed
Topic: 25655 Message: 25710

I ordered from K5NWA's "The Parts Place" last summer when I started my Beach 40 DSB. He stocks 7.2 MHz Resonators. I bought a bundle of 10 to ensure I'd have enough for various projects.

http://www.thepartsplace.k5nwa.com/index.php?route=product/category&path=68

He also has some cool power transistors there. Try the 2SC5171 or the KSC2690 if you want a low-power transmitter, such as a Michigan Mighty Mite. The 5171 is capable of at least a few watts under 15 MHz.

(I have no financial relationship with the above website and am posting them simply because I got excellent parts/service from them)

Ed AE7TE

On Fri, Jan 29, 2016 at 8:44 AM, Rob roomberg@... [regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> No cost.
> Just give me your mailing address.
>
>
>
>
>
> On 01/28/2016 04:14 PM, qrper723@... [regenrx] wrote:
>
>
>
> Hello Rob.
>
> I see you are sharing your stock of 7.16MHz ceramic resonator.
> If you could would you please share for me? I want 4 pieces of resonator
> for regenerative transceiver and the other homebrew project.
> Please let me know the cost including the shipping.
>
> I can pay via PayPal.
>
> Thanks for your support.
>
> JA9MAT Hidehiko.
>
>
>

>

25711. OT TRIAC driver replacement PNP transistor thanks for the help

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-29 06:03:15 UTC
From: Rob
Topic: 25711 Message: 25711

OK guys..... this was some pretty darn fast answers from a lot of you.....
THANK YOU!!!!

A few things to note here....
I was given this explanation:
I did notice that when you asked about transistor substitution, you specified PNP. That circuit is designed for a NPN transistor just as is drawn. The Zener and ballast cap create a negative supply, so the top rail is negative and the lower rail positive...opposite the way such things are usually drawn. So be sure to follow the schematic with regard to cap and diode polarity, it is correct. The transistor only sees the 15V supply as limited by the zener diode, so a 2n2222 should work fine.

So that takes care of the transistor.
I did get some more details about triac circuits and PDF files.....
ALL VERY GOOD INPUT for me. Thank you again.

As far as the hazards of AC goes....
YES I am fully aware that this is lethal voltages and must be protected from accidental electrocution.

This particular rundown searching for TRIAC circuitry is an educational experiment for me to learn how to
replace a clicking relay with a solid state device to run a washing machine AC motor and a sump pump.
Again..... all experimental.... nothing that MUST be built..... just a learning process.

25712. 7 Mhz resonators for fun post office rules

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-30 05:22:50 UTC
From: Rob
Topic: 25712 Message: 25712

I had an interesting visit with my local post master today.
He asked me if my letter was machinable.
what he really meant was
COULD MY LETTER PASS THROUGH the USPS letter machinery without
jamming or tearing open the paper envelope.

I handed him TWO different types of envelopes.
One envelope had one sheet of paper folded in thirds and it had
resonators taped to the center of that
folded paper which means it was a little lumpy near where the address is
written on the envelope.
This method is how I mailed most of the shared resonators.

SO IF YOU GET THIS RESONATOR FROM ME THEN PLEASE TELL ME IF THIS METHOD
IS SAFE
OR IF IT DAMAGES THE RESONATORS TO GO THROUGH THE POSTAL SYSTEM.

The second letter was wrapped in many layers of cardboard protection
because it was going to Japan.

25713. Re: 7 Mhz resonators for fun post office rules

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-30 07:06:12 UTC
From: les.au49@...
Topic: 25712 Message: 25713

Rob, regarding getting your ceramic resonators thru the post - Here in Australia we have a test for a "standard letter". The first deals with the "flat area" of the letter, and is irrelevant here. The second is a slot (probably) 5 or 5 mm opening. (and the width of the letter). A "standard" letter has to slide thru the slot without jamming or significant assistance. It's a simple test. I think a letter that passed this test would be "machine-able". I take the word "machineable" to mean "able to be machined". HA!

Good Luck with the Post Office.

Some time ago I got a package in the mail.
To collect the package I had to produce I.D. I produced my driver's license.
That included a photo of me, the name "Leslie Smith" and my address - the address on the parcel I hoped to collect. So - the Post Office "type" had a parcel addressed to Les Smith, a driver's license (issued to Les Smith) and a photo on the license - a photo of me.

Now, I admit I was in a cheeky mood by that time, since I was a regular customer at the Post Office.
When the "postal type" behind the counter asked, "Are you the Leslie Smith that lives at #36 Macquarie Street, I couldn't resist saying, "No I'm another Les Smith. I stole the driver's license you have in your hand from the letter box of the Leslie Smith that lives at Macquarie Street and then had plastic surgery. Now my face matches the photo of the face of the other Leslie Smith who DOES live at Macquarie Street.

This didn't help. The long line of people patiently waiting behind me fell down laughing.
The face of the women behind the PO counter turned visibly red.
Since then I have been particularly unwelcome.

Now I always go to another Post Office where they ask reasonable questions.

Les

25714. Wide-band RF Chokes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-30 08:33:43 UTC
From: J Ed
Topic: 25714 Message: 25714

Hello, all,

In a lot of RF transceivers, I see a familiar RF choke type used. It looks like a phenolic rod sized between 0.25-0.375" and has several winding banks on it. These normally come in 2.5 mH sizes but can come in others. I looked up data for such a part once and found that the listed resonant frequency was 1.3 MHz or so.

Either they misrepresent the self-resonant frequency or there's more at work here. If I wanted to make an RF choke for the input of a receiver, for example, I'd shoot for something like 2.5 mH so it would have a decent impedance on the lower bands. Such an inductor would also have such a low resonant frequency that it would be near-impossible to tune higher bands.

One solution I can think of is to place two high-value chokes in series. For example, I could get some ferrite cores like FT100-43 and wind them each for 500 uH. In series, they would be a large impedance (22k at 3.5 MHz) and their self-capacitance would be low enough to reach a higher frequency. Then again, the output capacitance of the RF amplifier tube / transistor would probably cause a resonance.

Would it be better to include dissimilar chokes in series? For example, a 500 uH choke in series with a 50 uH choke? The self-capacitance of the larger choke would likely shunt higher frequencies which would be blocked by the smaller choke.

This has applications in all sorts of wide band RF circuits. I'd need it for pretty much anything designed to cover a large part of the HF spectrum.

Ed AE7TE

25715. Re: Wide-band RF Chokes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-30 14:54:39 UTC
From: dulmagedon@...
Topic: 25714 Message: 25715

I make my own chokes because it is for me almost impossible if not impractical to buy them. For instance minimum shipping is $20 to here. SO, 100 to 200 turns of any fine wire scramble wound works well. I usually use a dowel 1/4 or in the case of POW dump scavange builds a pencil stub. They always work. Aside from the calculations there is also the problems so you know the uh needed but what is that in practical terms? (How many terms of what size wire on what type of core and at what diameter.) So. I pretend I am an electron. I make a winding that if I was trying to dance a RF freq I would say to heck with it because I would be too tired after passing through it. I know crude , unscientific, not good engineering practice or what have you, however, very practical and works, always. When you get to high power it is a bit trickier but usually doable. I have also taken a 5/8 dowel, put it in the lathe and made 3 deep groves with a square nose 3/16" bit in the wood and then filled the grooves with a continuous winding of the appropriate wire (able to carry the current required with a large margin of safety.) This is probably my best solution and is used on my 211 44 watt Hartley for one example. If you don't have a lathe chucking the wood in a drill and using the side of a file will give a workable result. Then , also, since I scrap a lot of Superhets for parts I tried using one of the IF coils and wouldnt you know they work very well. My breadboard 1943 station employs these. Now come the BIG problem. Can something made this easily and simply work. Some will say no. Some will produce a page of math showing it is all wrong (its ok I am apparently "always wrong" although usually successful) or you can try it for the ten minutes or so it takes and discover much to your surprise it s a very practical solution to the problem. Your understanding of the problem BTW is similar to mine to a certain extent. If I had a good supply of those old chokes I would still use them but I suspect performance would not change. However since I don't this works well.
donVE3LYX

25716. Re: [regenrx] Wide-band RF Chokes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-30 16:12:29 UTC
From: John Rehwinkel
Topic: 25714 Message: 25716

> I make my own chokes because it is for me almost impossible if not impractical to buy them. For instance minimum shipping is $20 to here.

While I'm in favor of making your own components, I'm dubious about your minimum shipping comment. You're in Canada, right? Tthe cheapest shipping to Canada is ... free (if you're not in a hurry).
If you look at Digi-Key's terms and conditions page:

http://www.digikey.com/en/terms-and-conditions
<http://www.digikey.com/en/terms-and-conditions>

You'll find this interesting footnote in section II ("Conditions of Order"), part 6 ("Shipping Charges"):

* When a check or money order accompanies your order, Digi-Key pays all shipping and insurance (our choice for method of shipping) to all addresses in the U.S. and Canada.

Oddly, Digi-Key's Canadian site does not include this verbiage.

It's inconvenient and slow, you have to print out your order, mail it to Digi-Key along with a check, and wait for them to send it to you by the cheapest/slowest method available. But it is free.

- John KG4L

25717. Re: [regenrx] Re: Wide-band RF Chokes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-30 16:52:22 UTC
From: Rob
Topic: 25714 Message: 25717

thanks Don
Very encouraging to hear that it is not so impossible to make home
brewed chokes that do work.

On 01/30/2016 09:54 AM, dulmagedon@... [regenrx] wrote:
>
> I make my own chokes because it is for me almost impossible if not
> impractical to buy them. For instance minimum shipping is $20 to here.
> SO, 100 to 200 turns of any fine wire scramble wound works well. I
> usually use a dowel 1/4 or in the case of POW dump scavange builds a
> pencil stub. They always work. Aside from the calculations there is
> also the problems so you know the uh needed but what is that in
> practical terms? (How many terms of what size wire on what type of
> core and at what diameter.) So. I pretend I am an electron. I make a
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> this works well.
> donVE3LYX
>
>

25718. Re: [regenrx] Wide-band RF Chokes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-30 20:21:44 UTC
From: dulmagedon@...
Topic: 25714 Message: 25718

Terms http://info.yahoo.com/legal/us/yahoo/utos/en-us/ Privacy
http://info.yahoo.com/privacy/us/yahoo/groups/details.html Guidelines
http://info.yahoo.com/guidelines/us/yahoo/groups/ Feedback
http://yahoo.uservoice.com/forums/209451 Help
http://help.yahoo.com/kb/index?page=product&y=PROD_GRPS&locale=en_US Blog
http://yahoogroups.tumblr.com/

Regenerative Receiver Group is a Public Group with 1650 members. Regenerative Receiver Group https://groups.yahoo.com/neo/groups/regenrx/info
Public Group, 1650 members

Primary Navigation Conversations
https://groups.yahoo.com/neo/groups/regenrx/conversations/messages Photos
https://groups.yahoo.com/neo/groups/regenrx/photos/photostream Files
https://groups.yahoo.com/neo/groups/regenrx/files More Secondary Navigation

Help https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN4417

https://groups.yahoo.com/neo/groups/regenrx/conversations/messages
https://groups.yahoo.com/neo/groups/regenrx/photos/photostream
https://groups.yahoo.com/neo/groups/regenrx/files

Back https://groups.yahoo.com/neo/groups/regenrx/conversations/messages

Next https://groups.yahoo.com/neo/groups/regenrx/conversations/messages/25717Previous
https://groups.yahoo.com/neo/groups/regenrx/conversations/messages/25715

25716Re: [regenrx] Wide-band RF Chokes
Expand Messages

John Rehwinkel
Today at 11:12 AM

Show message history

While I'm in favor of making your own components, I'm dubious about your minimum shipping comment. You're in Canada, right? Tthe cheapest shipping to Canada is ... free (if you're not in a hurry).
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You'll find this interesting footnote in section II ("Conditions of Order"), part 6 ("Shipping Charges"):

* When a check or money order accompanies your order, Digi-Key pays all shipping and insurance (our choice for method of shipping) to all addresses in the U.S. and Canada.

"Oddly, Digi-Key's Canadian site does not include this verbiage"
Well I am not fond of dubious as a word about me when I have spent a lifetime endeavouring to always be as factual as possible. However as you said it isnt on the Canadian website which more then likely means doesn't exist here. Even my tube supplier in Hamilton , only 2 1/2 to 3 hours away dings me $20 per order. Some may be less but still significant however the bottom line is when I can make one that functions properly in 10 to 15 minutes why would I go through all that. What would I gain? Absolutely nothing. I know of no one here or there who ships HERE free except perhaps the Chinese Ebay sites. In fact Ebay is littered with sites that say "Will not Ship to Canada" which in beyond understanding or rational. Usually all special shipping deals stop at our border and often say in the Contential USA. I have shipped free to my brother or sister who live south of the line but I still have to go and get it which usually cost $100 or so after I buy them dinner and pay for my gas.
I am not sure Free is in the Canadian vocabulary..;>)
donVE3LYX

25719. For Sale: 1930's Rationalized Autodyne Receiver and Crystal Controlled Transmitter

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-30 21:52:12 UTC
From: Whitebear1122
Topic: 25719 Message: 25719

I am selling my early 1930’s 80 meter cw station. I bought this from a fellow who got it from the estate of the OT who built it back in the early 1930’s. I’ve probably had it for 15 years. I looked that transmitter and receiver over from top to bottom hoping to find the OT’s call sign written in there. I couldn’t find it. Maybe you can. I planned to restore it and put it on the air but I never got around to it. I know there is real 1930’s electrons stuck in the tubes and wiring. The transmitter uses a nice big fat crystal so I know it was early 30’s. The OT’s receiver I believe is the ARRL Rationalized Autodyne by George Grammar, and that came out in QST January 1933 so I’m thinking 1933 to 1934. The set up is for 80 meters. I put pictures of the transmitter and receiver up on photobucket.com <http://photobucket.com/> at this location:
http://s1140.photobucket.com/user/651daisy/library/1930s CW Station <http://s1140.photobucket.com/user/651daisy/library/1930s%20CW%20Station> for your viewing

This album shows several pictures of the receiver and the transmitter.

On the transmitter, the plastic supports for the 80 meter coil long ago disintegrated. The transmitter came to me with the coil laying flat on the transmitter because the plastic supports disintegrated and the coil just laid down as it sat on the OT”s shelf forever. I bagged up the coil in a Baggie because it can be easily restored. The coils are plug in coils so I imagine this transmitter can be made to work on 160m and 40 meters as well. Just a guess.

The receiver has a snazzy National teardrop style vernier dial on the front. It has two Hammarund ceramic plug in coils marked 3500 on them.

I don’t know anything else about them. They’ve been sitting on my shelf for years. They would be fabulous to restore and put on the air if you want. If not, they have a lot of original 1930’s vintage parts in them if you decide to build your own transmitter and receiver. A lot of these parts are “unobtainium” these days

Asking $200 for the pair plus shipping. Thanks, 73, Scott WA9WFA

25720. For Sale: 1933 Rationalized Autodyne Regenerative Receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-30 22:11:52 UTC
From: Whitebear1122
Topic: 25720 Message: 25720

Seeing what I believe is a Rationalized Autodyne regenerative receiver from QST January 1933. It is built in a nice wrinkle finish cabinet with lid. It uses a National SW-5 style dial and bezel. There is some damage to the dial plastic. It looks like the OT put it too close to the audio tube and it did a little melting of the dial material. Bet that really irritated him :) That’s what he gets for putting a hot tube that close to the dial :)

I bought this maybe 10 years ago with the plan to strip it for parts and build my own Rationalized Autodyne but I never got around to it. I put photos of it up on photo bucket.com here:

http://s1140.photobucket.com/user/651daisy/library/Rationalized Autodyne Regen Receiver <http://s1140.photobucket.com/user/651daisy/library/Rationalized%20Autodyne%20Regen%20Receiver>

Asking $125 plus shipping. Thanks. 73, Scott WA9WFA

25721. National SW3 Model III

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-31 01:39:04 UTC
From: Whitebear1122
Topic: 25721 Message: 25721

Hi, I put up some photos on photobucket.com of my National SW-3 Model III. The model III was the last model made with manufacturing up through 1944. I casually looked 25 years for this model. I've consulted with a few experts and we've noted that there are 4 known examples of this out there. I'm not surprised because in the 1940's Superhetrodyne ruled. I've heard that the SW-3 Model III continued to be made that late into WWII due to it's simplicity, reliability, low cost, for use in Marine ship to ship, ship to shore communications. I've heard the term "banana boats" in those discussions.

The SW-3 Model III differs from the earlier models I and II by adding a factory B+ switch and headphone jack to the front panel, the antenna and ground opening moved from the rear to the left side rear., ceramic octal tube sockets and octal tubes. The Model III also had a new version of coils specially for the Model III. I have a band spread set for 20m, 40m, and 80m with the original boxes. I also have the dog house supply 5897 that accompanied this SW-3 when the OT bought it.

Here is the link: http://s1140.photobucket.com/user/651daisy/library/National SW3 Model III <http://s1140.photobucket.com/user/651daisy/library/National%20SW3%20Model%20III>

I thought you would get a kick out of seeing such a rare model SW-3.

73, Scott WA9WFA

25722. Re: [regenrx] National SW3 Model III

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-31 06:18:46 UTC
From: Hubert Miller
Topic: 25721 Message: 25722

I'm sure the SW-3 would not be used in any ocean crossings during WW2 on U.S. ships.
The receiver is not found in the FCC's list of approved receivers.
The British seem not to have worried so much about this - old style regens such as the Marconi 730 were used even past the war, according to an account i read of an English freighter sinking in 1947 - it had this receiver and a SPARK transmitter.

I think Alaska Steamship MAY have used SW-3 throughout the war ONLY on their 'inside passage' route from Seattle to Alaska points. I know their ships used the SW-3 as an LF receiver only, and Sargent model 10 regens for the HF. I believe the SW-3s replaced Alaska Steam's older IP-501 receivers in late 1941. Per maintenance papers i have, which don't explain why things were done.
-Hue Miller

25723. Re: [regenrx] National SW3 Model III

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-31 12:56:52 UTC
From: dulmagedon@...
Topic: 25721 Message: 25723

There was a whole lot of war(s) fought long before anyone under FCC rules even thought to get involved.
I recently read a long dissertation on the use of regens on ships and some of the unprovable myths surrounding their detection. British and Canadian ships had what amounts to a Farady cage around the radio room. I know the HRO was used as was the CSR5A (used to have one, NOS even) Very early radio rooms had a regen of sorts probably up to 1939 and it was known for its incredible sensitivity. My brother has a mid WW2 Canadian Navy RX with a short HF band group. I get him to check signal strength for me sometimes with it. It is a rare StewWarner piece made right here in our town about 1942. Factory is still there.
Have you used the SW3 much and if so what were your impressions?
donVe3LYX

25724. Re: [regenrx] National SW3 Model III

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-31 17:28:44 UTC
From: Richard
Topic: 25721 Message: 25724

Yes, we had fear that the Germans could df on receiver radiation to find our ships, and went to elaborate tests to qualify receivers. Several years ago I corresponded with retired German RO's, and learned that they knew very well about receiver radiation, but realized they would have to be within a few miles of the ship, at which point they could see it. Their underwater listening gear detected ships at 20 to perhaps 50 miles, was reliable, and gave useful information about the type of ship, etc. The real reason was electromagnetic compatibility aboard ship; with dozens of receivers running you can't have them listening to local oscillators.

When German subs began being surprised on the surface in spite of no warning from their radar detection receiver they thought we were detecting radiation from their receiver, and did tests. They found it could indeed be heard at a distance, depending on the altitude of the plane. The real reason was we had gone to microwave radar, which was not detectable in their radar warning receiver.

Military secrets don't remain secret for very long, Zum Beispeil, (for example) microwave radar. When 'planes went down they were immediately searched for new technology, analyzed, then neutralized and utilized as soon as possible.

Richard, AA1P

On 01/31/2016 07:56 AM, dulmagedon@... [regenrx] wrote:
>
> There was a whole lot of war(s) fought long before anyone under FCC
> rules even thought to get involved.
> I recently read a long dissertation on the use of regens on ships and
> some of the unprovable myths surrounding their detection. British and
> Canadian ships had what amounts to a Farady cage around the radio
> room. I know the HRO was used as was the CSR5A (used to have one, NOS
> even) Very early radio rooms had a regen of sorts probably up to 1939
> and it was known for its incredible sensitivity. My brother has a mid
> WW2 Canadian Navy RX with a short HF band group. I get him to check
> signal strength for me sometimes with it. It is a rare StewWarner
> piece made right here in our town about 1942. Factory is still there.
> Have you used the SW3 much and if so what were your impressions?
> donVe3LYX
>
>

25725. Re[2]: [regenrx] National SW3 Model III

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-31 18:19:21 UTC
From: Hubert Miller
Topic: 25721 Message: 25725

We discussed this at length over on the milsurplus group. The myths you mention arose because of the panic in the early months of the war, when Allied ships were easy pickings for U-boats and ideas for countermeasures were lacking. The regen receivers only danger was that they
MIGHT interfere with other radios in the same ship or maybe nearby ships. The FCC had a list of approved shipboard receivers and a list of banned receivers. It seems kind of crazy now, but there it was.
Meanwhile, British ships didn't have a strict list like this, and even the U-boats
had an entertainment radio (R3) that wouldn't have passed the FCC's rules. As an example of the level of fear in the USA, in a LIFE magazine article from WW2, it says on the run from Seattle to Alaska, which was even all coastal sailing, use of electric shavers was forbidden -
U-boats
MIGHT be able to DF them!
Ships in ocean convoys didn't use radios. They signaled using flags, blinkers, or VHF radio at 72 MHz, so U-boats had nothing to radio-track on.
The myth is almost dead, almost.
-Hue

------ Original Message ------
There was a whole lot of war(s) fought long before anyone under FCC rules even thought to get involved.
I recently read a long dissertation on the use of regens on ships and some of the unprovable myths surrounding their detection. British and Canadian ships had what amounts to a Farady cage around the radio room.
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Have you used the SW3 much and if so what were your impressions?
donVe3LYX

25726. Re: [regenrx] National SW3 Model III

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-31 21:20:22 UTC
From: dulmagedon@...
Topic: 25721 Message: 25726

Zum Beispeil (Es ist OK, Ich verstehe)
Well tests I did here on my own regens suggested that detection beyond even under a hundred feet is very difficult. However I know the fear of the unknown and desire and need to error on the side of safety is the way to go. The No 19 WS with its odd Cw set up (Key in to transmit and out to listen) runs the osc constantly and can be easily heard although faintly on a nearby rx. That surpises me as on AM no such problem exists the Tx is OFF. So you have to always use the No 19s RX to listen otherwise you will be listening to yourself too even though the key isnt pressed. must have been the "new guy" who designed that set up. Regens saw a lot of milt service in some forms on both sides. I have a German Spy locator radio, leather satchel and all used for detecting clandestine ops. It is NOS so I have refrained from firing it up as I don't want to injure it. The manual has been translated to English and the pages glued in then mimeographed but the pages still say blatt 3, blatt 4,
(usw.)

25727. Re: [regenrx] National SW3 Model III

Yahoo group: regenrx (2016 — 2017)
Date: 2016-01-31 22:13:49 UTC
From: Michael
Topic: 25721 Message: 25727

I have always been curious about the apparent fear of
detection of a WW2 regen. It would surely have been feasible
to surround the oscillating detector with solid shielding
and to front it with a grounded-grid RF amp. Very little
RF would "escape", which could have been verified in
laboratory tests. Or not???

OT : if Thunderbird experts are eavesdropping,
I am in the process of switching to W10 and TB. I would
like to totally deactivate the infuriating junk filters,
ie let everything through. It is quicker to glance at all
incoming than to have to check junk and trash folders for
valued missives which TB has condemned. I have tried
the following, without success :-
1. Tools > Acc Settings > Junk settings : untick
2. Help > Troubleshooting > Profile folder > Training.dat : rename
3. Options > Advanced > Config editor > mail.adaptive
filters.junk_threshold : reset to 999

Anything else I could try?

Michael

25728. Re: [regenrx] National SW3 Model III

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-01 00:30:41 UTC
From: Richard
Topic: 25721 Message: 25728

Fear, yes. I've read reports, towards the end, of German commanders shutting down radio for fear of detection, to much disgust by the radio operators.

Richard

On 01/31/2016 04:20 PM, dulmagedon@... [regenrx] wrote:
>
> Zum Beispeil (Es ist OK, Ich verstehe)
> Well tests I did here on my own regens suggested that detection beyond
> even under a hundred feet is very difficult. However I know the fear
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> I have a German Spy locator radio, leather satchel and all used for
> detecting clandestine ops. It is NOS so I have refrained from firing
> it up as I don't want to injure it. The manual has been translated to
> English and the pages glued in then mimeographed but the pages still
> say blatt 3, blatt 4,
> (usw.)
>
>

25729. Re: [regenrx] National SW3 Model III

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-01 01:00:15 UTC
From: Bill Cromwell
Topic: 25721 Message: 25729

Hi,

The fears and the steps to combat the fears were certainly real enough. I have one of those magnificent regens built RCA for the US Navy and designed just before the US entry into the war. There are two (count 'em 2) RF amplifiers (just for isolation and not for gain). It's a 2-v-3 regen (not counting the three tubes in the power supply). There is planty of shielding. A metal box inside a metal box with addition separate shields for the parts. I can connect the antenna terminal directly to a GC receiver and NOT hear the oscillating detector. How good is THAT!?! The regen can hear the BFO in the *pretty*, modern superhet quite easily. Looking back we know the hysteria was much ado about nothing. At the time is was a life & death struggle.

73,

Bill KU8H

On 01/31/2016 01:19 PM, Hubert Miller kargo_cult@... [regenrx] wrote:
>
> We discussed this at length over on the milsurplus group. The myths
> you mention arose because of the panic in the early months of the war,
> when Allied ships were easy pickings for U-boats and ideas for
> countermeasures were lacking. The regen receivers only danger was that
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> banned receivers. It seems kind of crazy now, but there it was.
> Meanwhile, British ships didn't have a strict list like this, and even
> the U-boats
> had an entertainment radio (R3) that wouldn't have passed the FCC's
> rules. As an example of the level of fear in the USA, in a LIFE magazine
> article from WW2, it says on the run from Seattle to Alaska, which was
> even all coastal sailing, use of electric shavers was forbidden - U-boats
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> Ships in ocean convoys didn't use radios. They signaled using flags,
> blinkers, or VHF radio at 72 MHz, so U-boats had nothing to
> radio-track on.
> The myth is almost dead, almost.
> -Hue
>

25730. Re: [regenrx] National SW3 Model III

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-01 01:05:46 UTC
From: Richard
Topic: 25721 Message: 25730

The concern about receiver radiation is not directly from the receiver, rather from the antenna. With an rf stage, energy from the oscillating detector, or superhetrodyne local oscillator, (more likely) can couple back through tube inter-electrode capacitance, and stray coupling, to the antenna. Without an rf stage it's worse, but probably not significant. With good construction the problem, if any, is insignificant. I have two RAL regenerative receivers with two rf stages, and when connected back-to-back, I cannot hear one oscillating in the other, even at 23 Mcs.

Richard

On 01/31/2016 05:13 PM, Michael michael.setaazul@...
[regenrx] wrote:
>
> I have always been curious about the apparent fear of
> detection of a WW2 regen. It would surely have been feasible
> to surround the oscillating detector with solid shielding
> and to front it with a grounded-grid RF amp. Very little
> RF would "escape", which could have been verified in
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> valued missives which TB has condemned. I have tried
> the following, without success :-
> 1. Tools > Acc Settings > Junk settings : untick
> 2. Help > Troubleshooting > Profile folder > Training.dat : rename
> 3. Options > Advanced > Config editor > mail.adaptive
> filters.junk_threshold : reset to 999
>
> Anything else I could try?
>
> Michael
>
>

25731. Re: [regenrx] National SW3 Model III

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-01 01:21:22 UTC
From: Bill Cromwell
Topic: 25721 Message: 25731

Hi Richard,

One of these days I will remember to do the same check with antenna terminal to antenna terminal with later superhet and the SW-3. The SW-3 has only one rf amp (1-v-1). I initially attempted to make a tuning chart for my RAK by using the superhet (and later an LM) to spot the detector frequency and plot that against the dial log. I ended up having to use a signal generator with a frequency counter so that I could spot the generator signal with the RAK to build the tuning curves. Nothing else could hear the RAK. The RAK could hear everything else.

Maybe I will find the SW-3 detector is easier to hear with superhet and the LM.

73,

Bill KU8H

On 01/31/2016 08:05 PM, Richard brunneraa1p@... [regenrx] wrote:
>
> The concern about receiver radiation is not directly from the
> receiver, rather from the antenna. With an rf stage, energy from the
> oscillating detector, or superhetrodyne local oscillator, (more
> likely) can couple back through tube inter-electrode capacitance, and
> stray coupling, to the antenna. Without an rf stage it's worse, but
> probably not significant. With good construction the problem, if any,
> is insignificant. I have two RAL regenerative receivers with two rf
> stages, and when connected back-to-back, I cannot hear one oscillating
> in the other, even at 23 Mcs.
>
> Richard
>

25732. Re[2]: [regenrx] National SW3 Model III

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-01 02:24:35 UTC
From: Hubert Miller
Topic: 25721 Message: 25732

There was a National receiver which had a "radiation-suppressor" unit
installed for that reason.
I think that was the NC-100. (RAO in Navy use.)
There was a suppressor unit add-on for the Halli SX-28 receiver; i have
never ever seen one tho.
Without it, the SX-28 was ruled not acceptable on any ship. The
"airborne SX-28", the AN/ARR-7
receiver, had an additional untuned RF stage as a radiation suppressor.
Then there were the Scott receivers RBO and SLRF and SLR-20, all built
to comply with the FCC's
specifications. The SLR i believe means "Special Low Radiation".
-Hue

------ Original Message ------
From: "Michael michael.setaazul@... [regenrx]"
<regenrx@yahoogroups.com>
To: regenrx@yahoogroups.com
Sent: 1/31/2016 2:13:49 PM
Subject: Re: [regenrx] National SW3 Model III

I have always been curious about the apparent fear of
detection of a WW2 regen. It would surely have been feasible
to surround the oscillating detector with solid shielding
and to front it with a grounded-grid RF amp. Very little
RF would "escape", which could have been verified in
laboratory tests. Or not???

25733. Re: [regenrx] Adapted to 6BA6, 6C4 and 6AQ5 or EL84 it is an excellent performing ¨modern¨ regenerative [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-01 02:29:51 UTC
From: Rajaram Bhat
Topic: 25670 Message: 25733

Hi Arnie and others:

In this group you and others have expressed the need to have a grounded grid first stage along with attenuators. The design you have written about in this email does not have such a feature. Is there not a problem with overloading the detector due to the rf amplifier front end without any attenuators?

Regards,

Raj

> On Jan 24, 2016, at 10:23 AM, 'Prof. Arnaldo Coro Antich' coro@... [regenrx] <regenrx@...m> wrote:
>
> Si amigo ! Yes my friend , you are absolutely right, and when built
> many years ago when I was in my late teens it worked very well
> indeed... Also a super-regenerative from the same period provided
> my first 6 meters band amateur radio two way contact.
> The audio section 6J5 - 6V6 was identical on the super-regenerative
> that used a 955 acorn tube as the detector... and I also built another
> one using a 6C4 detector, both mounted horizontally to make connections
> as short as possible...
> 73 and DX
> Arnie Coro
> CO2KK
>
>

25734. Re: [regenrx] National SW3 Model III

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-01 02:54:40 UTC
From: dulmagedon@...
Topic: 25721 Message: 25734

It was a rumour among navy men that the Germans could hear a receiver at 100 miles.We now know that is unrealistic but how could you be sure back then. Now in the comfort of it not being life threatening we have the luxury of thinking it through. First anyone who has run a regen on battery power knows how little B voltage it actually draws. Using ten 9 volts I regularly get 6 months to a year's use. If I was transmitting appreciable power I would be lucky to get an hour or so..Then there is the case that can be made that a regen does not like to be hooked to a reasonant antenna as it will have trouble functioning. This is one of the main causes of the so called dead spots. So next time you fire up your low power transmitter hook it to a non reasonat antenna and see how far you get. Probably not far. Anyone who has run early vintage I tube gear or QRP knows everything must be right if you expect to be heard. Otherwise your power is quickly swallowed up in loses and probably wont make it across the road. However how sure can we be? Sure enough to bet you life on it? And we know noise levels which we all deal with can ruin any communication and low power like a few mW simply doesnt cut it most of the time. Back in the 80s I made a CW reconstruction deal. It was a 741 op amp, a clipper reverse paralleled 1N94A s feeding a hi-pass low pass active filter which drove a opto-isolator circuit which keyed a peizo buzzer. I could pull nothing signals out of the mud and recreate them as clean clear signals with the peizo buzzer but it took a lot of fiddling to get it working. I remember my younger non ham brother made fun of it and said he saw no point in it. In a fit of mid 20s rage I destroyed it. That was pretty stupid I know now but I was a slow learner about life. Whether it would pull regen faint signals out of the noise I dont know as I never tried it. It would recreate signals you could only just tell were there. Seeing as how I am a mech/ machinist and only hobbyist it is maybe not a stretch that someone who actually knew what they were doing in electronics could at least increase the detection capability dramatically is perhaps not too far a stretch. It is a deep and interesting subject anyway.
donVe3LYX

25735. Re: Looking for Good Solid State MW Regen Receiver Design?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-01 08:13:02 UTC
From: les.au49@...
Topic: 25659 Message: 25735

Hello Dave,

I suggest you look at two articles.
(1) In 1968 the ARRL published a 3 transistor design (JFET) by Lange.
(2) More recently Charles Kitchin published an article "High Performance Regenerative Receiver".

Both articles are easily found on the net. Filetype is pdf.

Good luck - good building!

Les

25736. Re: Looking for Good Solid State MW Regen Receiver Design?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-01 08:14:31 UTC
From: les.au49@...
Topic: 25659 Message: 25736

An alternate place to look would be one of the three "Desert Ratt" articles.
This uses (if my memory is correct) bipolar transistors.
I'm not certain if it covers the BC band.

Les

25737. Re: [regenrx] National SW3 Model III

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-01 09:26:19 UTC
From: Richard
Topic: 25721 Message: 25737

Well,they could have run some tests and put the whole thing to bed. When you have ignorant people making decisions that's what happens. We see that today too, ignorant politicians making stupid decisions. Every era has some public stupidities, but they are becoming too expensive. Enough.....

Richard

On 01/31/2016 09:54 PM, dulmagedon@... [regenrx] wrote:
>
> It was a rumour among navy men that the Germans could hear a receiver
> at 100 miles.We now know that is unrealistic but how could you be sure
> back then. Now in the comfort of it not being life threatening we have
> the luxury of thinking it through. First anyone who has run a regen on
> battery power knows how little B voltage it actually draws. Using ten
> 9 volts I regularly get 6 months to a year's use. If I was
> transmitting appreciable power I would be lucky to get an hour or
> so..Then there is the case that can be made that a regen does not like
> to be hooked to a reasonant antenna as it will have trouble
> functioning. This is one of the main causes of the so called dead
> spots. So next time you fire up your low power transmitter hook it to
> a non reasonat antenna and see how far you get. Probably not far.
> Anyone who has run early vintage I tube gear or QRP knows everything
> must be right if you expect to be heard. Otherwise your power is
> quickly swallowed up in loses and probably wont make it across the
> road. However how sure can we be? Sure enough to bet you life on it?
> And we know noise levels which we all deal with can ruin any
> communication and low power like a few mW simply doesnt cut it most of
> the time. Back in the 80s I made a CW reconstruction deal. It was a
> 741 op amp, a clipper reverse paralleled 1N94A s feeding a hi-pass low
> pass active filter which drove a opto-isolator circuit which keyed a
> peizo buzzer. I could pull nothing signals out of the mud and recreate
> them as clean clear signals with the peizo buzzer but it took a lot of
> fiddling to get it working. I remember my younger non ham brother made
> fun of it and said he saw no point in it. In a fit of mid 20s rage I
> destroyed it. That was pretty stupid I know now but I was a slow
> learner about life. Whether it would pull regen faint signals out of
> the noise I dont know as I never tried it. It would recreate signals
> you could only just tell were there. Seeing as how I am a mech/
> machinist and only hobbyist it is maybe not a stretch that someone
> who actually knew what they were doing in electronics could at least
> increase the detection capability dramatically is perhaps not too far
> a stretch. It is a deep and interesting subject anyway.
> donVe3LYX
>

>

25738. Re: Looking for Good Solid State MW Regen Receiver Design?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-01 17:14:20 UTC
From: DASzasz@...
Topic: 25659 Message: 25738

Les:

Thank you for your help thus far on the project. I am familiar with the 1968 design, and am tempted by it since I have a copy of an ARRL handbook from the mid 60's that includes it presently moldering in the closet. Maybe as a next project if I can track down the old transistors (or modern equivalents) to build it? I was also tempted by other more recent solid state regens but want to stick with discrete parts. Perhaps I'll only to use an I.C. for the audio amplifier.

So I am slowly gathering parts for the "Moorabbin". I had some trouble finding the 160pf variable and thought of either building one from scratch or tearing down a 365pf to build it. And a small collection of long ferrite rods should be arriving in the mail soon. I'd like to read the Amateur Radio Magazine articles but don't know if the WIA offers reprints.

Also, I may include a cheap chinese kit frequency counter loosly coupled to the set on oscillation as a readout.

very exciting!

Cheers & 73's
Dave NV3F

25739. Re: Looking for Good Solid State MW Regen Receiver Design?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-01 17:57:46 UTC
From: kevinferg@...
Topic: 25659 Message: 25739

Substituting Bipolar transistors is pretty easy, and there are only a few pitfalls to avoid if you are not trying to get them to work at VHF or somethin' silly. The main thing is to match either PNP or NPN. Then small signal or power type, and it has to stand the voltage, but at 12V or less, any Si transistor will do. You need to be able to have enough Ic, but too high a rating will be a big die that may not have good frequency response, so more is often not better.

1960s might be a little early of a choice for a transistor design. In that era most everyone learned the craft on tubes, and there was some hollow state thinking that didn't always work so well. You pretty much never want to bias a base-emitter junction with voltage like you would a grid for example...you want to establish a base current. Books and articles of that period warn again and again about thermal runaway, which isn't hard at all to avoid if you think current instead of voltage, and they are cheap, so you can use more of them or bigger die, and so you shouldn't be tempted to push them to the limit...but tube designers were always trying to save a tube.

25740. Re: [regenrx] National SW3 Model III

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-01 18:12:07 UTC
From: kevinferg@...
Topic: 25721 Message: 25740

It is worth remembering that it is signal/noise that determines if you can copy a signal. It isn't so hard to hear a whisper in a library, but in a crowded discotheque you can go hoarse trying to have a conversation.

The EM ambient noise level has increased notably just in my lifetime, I'm certain it isn't just nostalgia.

On the open seas, you are a long way from any QRM sources. I suspect that not all of the fear of detection was unfounded. As I understand it, there was a standardized distress frequency (was 500 kHz for shipping later on, before the satellite era.) so the Germans knew right where to listen. As that receiver wouldn't normally be used for traffic, the regeneration might be left a little high to insure there was still a beat note if the set drifted a little.

25741. Re: [regenrx] National SW3 Model III

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-01 19:29:29 UTC
From: Bill Cromwell
Topic: 25721 Message: 25741

Hi,

We already have the reports from after the war that make it clear
listening for oscillating detectors was NOT practical. Sure you can
probably here them - after you are already eyeball to eyeball with them.
The submarine warfare threat was terrifying and a matter of life and
death. They weren't taking any chances.

73,

Bill KU8H

On 02/01/2016 01:12 PM, kevinferg@... [regenrx] wrote:
> It is worth remembering that it is signal/noise that determines if you
> can copy a signal. It isn't so hard to hear a whisper in a library,
> but in a crowded discotheque you can go hoarse trying to have a
> conversation.
>
> The EM ambient noise level has increased notably just in my lifetime,
> I'm certain it isn't just nostalgia.
>
> On the open seas, you are a long way from any QRM sources. I suspect
> that not all of the fear of detection was unfounded. As I understand
> it, there was a standardized distress frequency (was 500 kHz for
> shipping later on, before the satellite era.) so the Germans knew
> right where to listen. As that receiver wouldn't normally be used for
> traffic, the regeneration might be left a little high to insure there
> was still a beat note if the set drifted a little.
>
> --
>

25742. Re[2]: [regenrx] National SW3 Model III

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-01 19:37:13 UTC
From: Hubert Miller
Topic: 25721 Message: 25742

Long ago i read a couple things that also have weight on the subject. I read that at the onset of WW2, English that still had WW1-era regen receivers, i mean simple things with no RF stage, had them changed out for receivers with less chance of radiating. Shipping companies tended to keep in place what was working; why spend more money? Some of the older regen ship receivers were REALLY simple, like 2 tubes. However, their replacement doesn't mean the end of regens on British ships; i have two that made it through the war, in service. They are NOT as elaborate as U.S. receivers; they are 1-v-2 circuits, i mean 1 RF, detector, 2 audio stages.

The other item was an article in 'Sea Classics' magazine. In the memoir of a U-boat crewman, he said they had listened for the 2 MHz voice communications between convoy ships, but heard nothing. Radio communications in convoys had been moved to visual signaling or 72 MHz short range, low power voice. This U-boat crewman did NOT say a thing about listening for ship's receivers. I am sure they DID listen on 500 kHz for SOS and SSS (sighted submarine) signals from individual ships not sailing in convoys - that would be coastal or Caribbean. Everyone listened on 500 kHz, even SWL listeners.
One man i spoke with, many years ago, told me that on the West Coast USA, at times they could hear ship SOS signals from the Atlantic.
-Hue Miller

------ Original Message ------
It is worth remembering that it is signal/noise that determines if you can copy a signal. It isn't so hard to hear a whisper in a library, but in a crowded discotheque you can go hoarse trying to have a conversation.The EM ambient noise level has increased notably just in my lifetime, I'm certain it isn't just nostalgia.On the open seas, you are a long way from any QRM sources. I suspect that not all of the fear of detection was unfounded. As I understand it, there was a standardized distress frequency (was 500 kHz for shipping later on, before the satellite era.) so the Germans knew right where to listen. As that receiver wouldn't normally be used for traffic, the regeneration might be left a little high to insure there was still a beat note if the set drifted a little.
Posted by: kevinferg@...

25743. Re: National SW3 Model III

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-02 03:18:07 UTC
From: les.au49@...
Topic: 25721 Message: 25743

G'day all,
I'm surprised no-one mentioned SOE agents working in occupied France using the Paraset. The Paraset receiver is a 0-v-1 "thingy", and the comms procedure was this: (as I understand it).

The "agent" was issued with crystals - her transmitter frequency was set, and known at Bletchley (or wherever). Communication began with England calling, on a pre-assigned frequency. The agent listened to England on this frequency. Clearly a "regen" set could NOT be easily heard. It is impossible that SOE would have overlooked the possibility that the Abwer (or Gestapo or whoever) would listen for the receiver at this time, had it been possible to "hear" the receiver.

Beyond this, consider the maths. The detector in a regen set might draw 1mA. If the receiver ran a +250V B+ line that would amount to 250mW IF ALL THE POWER WENT "UP THE STRING". The Paraset detector "tube" is type 6SK7, operating in the Hartley circuit. The screen grid voltage is varied by 20k pot. I never measured the screen grid voltage in a Parset, but in a receiver I built using a 6AK5 pentode the screen sat at between 12 to 15 volts when the set was oscillating and properly adjusted. Because the plate has little RF on it (and screened from the control grid, G1, by the screen grid, G2, that means that the DC input to the detector would be around 12 to 15mW. Of this, only 60% would be converted to RF, and after that there is the question of how that could be coupled effectively to the aerial.

This is the note from a "guide to the Pat Hawker papers".

"John Patrick Hawker MBE (1922-2013), G3VA, popularly known as Pat Hawker, was a professional and amateur radio engineer, who during the Second World War was actively engaged in British Intelligence services, and Is associated with the Bletchley Park code-breaking center, working with clandestine radio to support resistance units. Hawker was involved in many aspects of radio, beginning in World War II as a member of the Radio Security Service (RSS) and its connections to British Security Service Military Intelligence Ml5 and the Secret Intelligence Service Ml6. In 1941 at the young age of 19 he started at Bletchley Park as an intercept operator. The bay he worked in contained two HRO receivers, each operator being given a specific list of signals to listen for. In April
1943 he was transferred to Section VIII unit, and served at Weald Station as a two-way radio operator, under Morse code expert Captain Robert Henry "Harry" Tricker. In 1944 Pat joined unit SCU9 and was sent Into war zones where covert communications were required . After the D-Day Allied invasion of Europe in June, with the small mobile unit headed to Normandy under the direction of Tricker who was now a Major, Pat went to Normandy, where he remained until August. He subsequently travelled to Paris, Brussels, Eindhoven, etc. and into Germany, with the same British intelligence services unit, mainly to report German troop movements and to connect 21st Army Group with Secret Intelligence Service field agents and SUSSEX intelligence teams."

My point here is that SOE (and co) was staffed by well informed types, like Pat Hawker. He would be aware of the point I made above. I need press this argument no further - the conclusion is obvious.

To end where I stated: I'm surprised no-one has made this argument in this thread before now.
I'm confident the receiver wasn't a detectable link used by Germany during WWII.

Les

25744. Re: [regenrx] Re: National SW3 Model III

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-02 08:15:07 UTC
From: Hubert Miller
Topic: 25721 Message: 25744

Very valid point, Les.
The only thing i would add is, that it seems the Paraset was rather little used in Europe itself. Norway, yes, but then the level of clandestine radio
transmitting from Norway pales compared to the numerous stations in central and eastern Europe.
For one proof of this, i recommend "The Clandestine Radio Operators", by Jean-Louis Perquin; book published in France. MANY never before seen by me photographs of the operations; MANY color photos of numerous types of equipment by all western Allies. (Early editions of "Two Eggs On My Plate"
show the Paraset in use in Norway. Two eggs served to the agent for breakfast was his silent message that his insertion into enemy territory was soon
to happen.)
I recall an article by Pat Hawker in 'Monitoring Times' magazine, U.S.A., now defunct. He described the capture and turning-around of a German
stay-behind agent. There's a photo of the agent's radio, and it's a type SE 110/8 (i think that's the nomenclature). The receiver in this was a 1-V-2 regen.
-Hue Miller

------ Original Message ------
From: "les.au49@... [regenrx]" <regenrx@yahoogroups.com>
Sent: 2/1/2016 7:18:07 PM

G'day all,
I'm surprised no-one mentioned SOE agents working in occupied France using the Paraset. The Paraset receiver is a 0-v-1 "thingy", and the comms procedure was this: (as I understand it)....

25745. Re: [regenrx] Re: National SW3 Model III

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-02 11:07:51 UTC
From: les.au49@...
Topic: 25721 Message: 25745

Hello Hue,
I know nothing about this. Pat Hawker wrote a tribute to John Brown in British Vintage Wireless Society - Volume 18 #1 (Feb 1993). In this he writes about the various sets used in France, the problem involved with each set, and so on. One point made was that the Germans listened for key clicks and even a marginal dimming of light globes as a transmitter was keyed. If you want to find this, use keywords "Pat Hawker" and "John Brown" or BVWS with Google.

Les

25746. Re: [regenrx] Re: National SW3 Model III

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-02 14:27:14 UTC
From: Bill Cromwell
Topic: 25721 Message: 25746

Hi Les,

The figures I have for current drain on the B+ for an oscillating detector are in microamps and power in higher microwatts. If *all* of that is in the generated rf signal and *all* of that reaches the antenna and the antenna radiates *all* of it somebody 'might' be able to RDF it beyond the range where they could hear the mechanical sounds of the telegraph key in action. Just personal observations with the information that *I* have. YMMV. It's more likely the transmitter would more subject to RDF success.

73,

Bill KU8H

On 02/01/2016 10:18 PM, les.au49@... [regenrx] wrote:
>
> ---snip---
>
> Beyond this, consider the maths. The detector in a regen set might
> draw 1mA. If the receiver ran a +250V B+ line that would amount to
> 250mW IF ALL THE POWER WENT "UP THE STRING". The Paraset detector
> "tube" is type 6SK7, operating in the Hartley circuit. The screen
> grid voltage is varied by 20k pot. I never measured the screen grid
> voltage in a Parset, but in a receiver I built using a 6AK5 pentode
> the screen sat at between 12 to 15 volts when the set was oscillating
> and properly adjusted. Because the plate has little RF on it (and
> screened from the control grid, G1, by the screen grid, G2, that means
> that the DC input to the detector would be around 12 to 15mW. Of this,
> only 60% would be converted to RF, and after that there is the
> question of how that could be coupled effectively to the aerial.
>
----snip-----

25747. Re[2]: [regenrx] Re: National SW3 Model III

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-02 19:10:27 UTC
From: Hubert Miller
Topic: 25721 Message: 25747

Thanks for the lead ! I surely will look for that interesting article.

Years ago, i was told by Arthur Gibbons, now deceased, about a case in Gloversville, New York state, probably 1942.
Some odd people had rented a house there and seemed to come and go, but never moved in any furniture or seemed to actually live there.
One of the neighbor women was listening to a radio serial program, so called "soap opera", and she heard rythmic clicking noise in her radio which she smartly suspected might be some kind of telegraphy. She took her suspicion to the nearest Navy recruiter, who in turn contacted Naval Intelligence (O.N.I.) who in turn contacted the F.C.C. A raid was staged on the house but this same woman was alrready standing outside
watching the house and waiting for the F.C.C.; the people in the house fled, leaving some of the radio equipment and batteries. (Oh yes, one key item, they had never had the electricity turned on ! seems pretty dumb!) I have read a bunch of accounts but nowhere found this incident. It may have been that the agents (spies) were rolled up later and this miss just forgotten. 'Someday' i'll write up an article on it
with some supporting materials. But the point is yes, "key clicks" from the transmitter could be detected at some distance.
-Hue

------ Original Message ------
From: "les.au49@... [regenrx]" <regenrx@yahoogroups.com>
Sent: 2/2/2016 3:07:51 AM

Hello Hue,
I know nothing about this. Pat Hawker wrote a tribute to John Brown in British Vintage Wireless Society - Volume 18 #1 (Feb 1993). In this he writes about the various sets used in France, the problem involved with each set, and so on. One point made was that the Germans listened for key clicks and even a marginal dimming of light globes as a transmitter was keyed. If you want to find this, use keywords "Pat Hawker" and "John Brown" or BVWS with Google.
Les

25748. Re[2]: [regenrx] Re: National SW3 Model III

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-02 19:16:55 UTC
From: Hubert Miller
Topic: 25721 Message: 25748

Just a point of possible interest. If you look up 'CMS radio' you'll find articles and photos of the U.S. Navy type CMS radio from early WW2. The receiver part is obviously for clandestine use, and it's a 3-tube regen of simple design - no volume control! And, no one knows the why or where of this set! It seems never to have been used, except maybe for training? My suspicion is that it was a stopgap set for coastwatchers and the Philippine resistance, but was never issued due to requiring too much 'ham radio' knowledge to use it.
-Hue

25749. RE: Re[2]: [regenrx] Re: National SW3 Model III

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-02 19:41:46 UTC
From: Mike Feher
Topic: 25721 Message: 25749

I think for volume you just had to move the earphone tap around to different impedance audio outputs. Hopefully in a couple of months I will get on of mine on the air. 73 – Mike

Mike B. Feher, N4FS

89 Arnold Blvd.

Howell, NJ, 07731

732-886-5960

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Tuesday, February 02, 2016 2:17 PM
To: regenrx@yahoogroups.com
Subject: Re[2]: [regenrx] Re: National SW3 Model III

Just a point of possible interest. If you look up 'CMS radio' you'll find articles and photos of the U.S. Navy type CMS

radio from early WW2. The receiver part is obviously for clandestine use, and it's a 3-tube regen of simple design -

no volume control! And, no one knows the why or where of this set! It seems never to have been used, except

maybe for training? My suspicion is that it was a stopgap set for coastwatchers and the Philippine resistance, but

was never issued due to requiring too much 'ham radio' knowledge to use it.

-Hue

25751. Re: [regenrx] Re: National SW3 Model III

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-02 21:16:48 UTC
From: Bob
Topic: 25721 Message: 25751

In those days QRN was considerably less than it is today so the possibility of detection of weaker signals was a lot higher with a sensitive receiver.
Having said that, I still receive mW signals from Europe and the USA on 10MHz but now of course it is all digital decoding.

Bob VK7ZL

On 2/02/2016 20:22, 'Michael Bittner' mmab@... [regenrx] wrote:
>
> □
>
> Don't forget the Type 31/1 SOE "Sweetheart" receiver. Regen detector
> with 2 stages of audio amplification, all 1T4s. I often wondered how
> risky it might be to operate this receiver for fear of detection.
> However, previous correspondents on this thread seem to indicate that
> such fear is unfounded.
> My only experience with detection of nearby oscillating regens was
> when we lived in an apartment in Brooklyn, NY back in the late 1930s.
> We had a midget AC/DC superhet in the kitchen, and often heard loud
> whoops and whistles of regens interfering with our listening. We
> never knew whether they came from neighbors next door or across the
> street or further away. In those days, the superhet was gradually
> taking over, but there were still many regens in everyday use and
> their antennas were often crossing each other on the roofs of the
> apartments. Mike, W6MAB

25753. Re[4]: [regenrx] Re: National SW3 Model III

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-02 21:41:26 UTC
From: Hubert Miller
Topic: 25721 Message: 25753

I suggest the mechanism of this working was that your crystal radio antenna was reradiating radio waves, including the wavelength your parents'
radio was tuned to, and your jiggling the detector contacts "AM modulated" the reradiated signal. The reradiated power is very low, but it may
be enough for specific cases. I think Popular Electronics had an article on this once, even showing how you could voice modulate the reradiated wave with no power on your part required. In the Cold War the Russians even had a 'bug' in the U.S. Embassy in Moscow that used this principle. The 'bug' was powered by a microwave signal. The beauty of this scheme was that by turning off their microwave transmitter, they could de-power the bug - it no longer 'transmitted'.
-Hue Miller

------ Original Message ------
From: "'Leonard Meek' lemeek@... [regenrx]"
<regenrx@yahoogroups.com>
Sent: 2/2/2016 1:19:32 PM
☐
When I was a kid back in the '30's, I used to play with my crystal set at night after bed time. My dad said he always knew when I was doing that instead of going to sleep because he could hear the scratching on the radio as I probed the crystal. The only connection I could figure was that I was using the water pipe as a ground, and so was the neutral of the AC power. This was before polarized and 3 prong plugs.
Leonard

25754. Re: Re[4]: [regenrx] Re: National SW3 Model III

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-02 22:06:54 UTC
From: Leonard Meek
Topic: 25721 Message: 25754

Thanks for the explanation, Hue. I've wondered about that for the last 70 years.

Leonard

----- Original Message -----
From: Hubert Miller kargo_cult@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Tuesday, February 02, 2016 11:41 AM
Subject: Re[4]: [regenrx] Re: National SW3 Model III

I suggest the mechanism of this working was that your crystal radio antenna was reradiating radio waves, including the wavelength your parents'
radio was tuned to, and your jiggling the detector contacts "AM modulated" the reradiated signal. The reradiated power is very low, but it may
be enough for specific cases. I think Popular Electronics had an article on this once, even showing how you could voice modulate the reradiated
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The 'bug' was powered by a microwave signal. The beauty of this scheme was that by turning off their microwave transmitter, they could de-power
the bug - it no longer 'transmitted'.
-Hue Miller

------ Original Message ------
From: "'Leonard Meek' lemeek@... [regenrx]" <regenrx@yahoogroups.com>
Sent: 2/2/2016 1:19:32 PM
☐
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Leonard

25755. Re: [regenrx] Re: National SW3 Model III

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-02 22:37:26 UTC
From: Richard
Topic: 25721 Message: 25755

I read somewhere that RO's in the 20's and 30's could hear regenerative receivers 30 miles at sea. It's hard to believe, but if your triode regen has 250 volts on the plate and you don't know what you're doing (likely) you could transmit a potent signal.

Richard, AA1P

My only experience with detection of nearby oscillating regens was when we lived in an apartment in Brooklyn, NY back in the late 1930s. We had a midget AC/DC superhet in the kitchen, and often heard loud whoops and whistles of regens interfering with our listening. We never knew whether they came from neighbors next door or across the street or further away. In those days, the superhet was gradually taking over, but there were still many regens in everyday use and their antennas were often crossing each other on the roofs of the apartments. Mike, W6MAB
-

25756. RE: [regenrx] Re: National SW3 Model III

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-02 23:53:12 UTC
From: Hubert Miller
Topic: 25721 Message: 25756

That would be one of the WW1 and 1920s style 0-v-n type regens with no RF stage. They COULD be used as transmitters especially if you turned up
The regen. BUT they didn’t use 250 volts on the plate, that is unrealistic. And they were battery powered, so the B+ was more likely at most 67.5 – 90
Volts. And the antenna coupling would have to be run close.
-Hue

Sent: Tuesday, February 2, 2016 2:37 PM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Re: National SW3 Model III

I read somewhere that RO's in the 20's and 30's could hear regenerative receivers 30 miles at sea. It's hard to believe, but if your triode regen has 250 volts on the plate and you don't know what you're doing (likely) you could transmit a potent signal.

Richard, AA1P

25757. Re: [regenrx] Re: National SW3 Model III

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-03 02:11:23 UTC
From: Leonard Meek
Topic: 25721 Message: 25757

I once built a regen with a 958 acorn tube back when we only had 3 radio stations here. I found that I could substitute a carbon mike for the headphones and transmit a signal to a radio up to 50 feet away. Irritated some people.

Leonard

----- Original Message -----
From: Richard brunneraa1p@comcast.net [regenrx]
To: regenrx@yahoogroups.com
Sent: Tuesday, February 02, 2016 12:37 PM
Subject: Re: [regenrx] Re: National SW3 Model III

I read somewhere that RO's in the 20's and 30's could hear regenerative receivers 30 miles at sea. It's hard to believe, but if your triode regen has 250 volts on the plate and you don't know what you're doing (likely) you could transmit a potent signal.

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-

25758. RE: [regenrx] Re: National SW3 Model III

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-03 02:30:39 UTC
From: dulmagedon@...
Topic: 25721 Message: 25758

That is certainly true. In some cases the only circuit difference is the regen pot and phones. Bypass them and you have a transmitter . I have played twice with such circuits. Both were 56 tube based hartley regens and a bump in voltagefrom bypassing phones and regen pot wiper turned them into a Tx instantly. So if an op had a tendancy to allow the regen too much R it would increase the range. I guess we have been all assuming properly run regens. Forgetting probably all of us have once or twice had the R up too high ourselves. Bypassing the phones and pot actually works pretty well for making it from a regen to a transmitter. With a good dual voltage power supply and some careful switching it can be a fairly practical rig. And then I have never been at sea for long and not with a radio but I suspect QRN is not as high with no powerlines, no neighbours tvs no buzzing transformers at a nearby pole and no noisy street lamps. Is there a noticible difference? Someone must know.
donVe3LYX

25759. John Brown G3EUR

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-03 11:10:50 UTC
From: dave bull
Topic: 25759 Message: 25759

HI everybody,

That brought back a flood of memories. I was fortunate to know John for many years as member of the Havering Amateur Radio Club. John was a kind and friendly man who did everything possible to encourage and guide young engineers like me and I remember listening with awe to his lectures, and the more informal sessions in the pub after club meetings.

I still have several treasured possessions that John presented to me as a thank you for the lectures and seminars I gave at the club.

73s Dave G8YSK

25760. Re: [regenrx] Re: National SW3 Model III

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-03 11:59:27 UTC
From: Richard
Topic: 25721 Message: 25760

I inquired about this point with several retired RO's, and - it depends on the ship. Some are very quiet, and some have substantial ship-generated noise. My guess is older ships with DC power systems were worse, with DC motor commutator noise. My AR-8506-B receiver (ac/dc) had an optional power line filter for that purpose. A friend who was in the Navy said it was very quiet at sea

Richard, AA1P

On 02/02/2016 09:30 PM, dulmagedon@... [regenrx] wrote:
>
> That is certainly true. In some cases the only circuit difference is
> the regen pot and phones. Bypass them and you have a transmitter . I
> have played twice with such circuits. Both were 56 tube based hartley
> regens and a bump in voltagefrom bypassing phones and regen pot wiper
> turned them into a Tx instantly. So if an op had a tendancy to allow
> the regen too much R it would increase the range. I guess we have been
> all assuming properly run regens. Forgetting probably all of us have
> once or twice had the R up too high ourselves. Bypassing the phones
> and pot actually works pretty well for making it from a regen to a
> transmitter. With a good dual voltage power supply and some careful
> switching it can be a fairly practical rig. And then I have never been
> at sea for long and not with a radio but I suspect QRN is not as high
> with no powerlines, no neighbours tvs no buzzing transformers at a
> nearby pole and no noisy street lamps. Is there a noticible
> difference? Someone must know.
> donVe3LYX
>
>

25761. FS: Pair of traps

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-03 16:23:05 UTC
From: Bry Carling
Topic: 25761 Message: 25761

Any use to someone here?

Pair of Real 40m LC antenna traps - by SAVOY ELECTRONICS - they look old and unused.
There is a hairline crack in one case, so it could be reinstalled in a different box. Hence the
super low price.

Picture here:
http://af4k.com/imag/ham/traps.jpg

Details at:
http://af4k.com/miscpart.htm

Will sell the pair for $25.00 plus shipping.

73 - Bry Carling, AF4K

25762. John Brown G3EUR

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-03 18:47:46 UTC
From: les.au49@...
Topic: 25759 Message: 25762

G'day Dave, When I read your posting about John Brown, and that you knew him, personally, I nearly fell off my chair with surprise! This is surely connection with history! I would like to hear more about him, and the technology of those times - both before, during and after war - into the 50s. I imagine at that time "radio" was quite different from now.

Even by the 60s "radio" had changed considerably. I lived next door to Geoff D'Emden, VK7ZAS. I was about 14 years. He helped me build the my first regen receiver. It was (this will surprise you, no doubt) a Twinplex, straight from the ARRL handbook. Now to the interesting bit. I complained because I couldn't "hear" (I mean resolve) the weekly broadcast from the local branch of the WIA (Wireless Institute) because IT WAS SBB. I remember clearly, that Geoff said, "Yes, I told them to stick with AM for the broadcast." The point here is that a properly built regen can resolve SSB, but (it seems) no-one was aware of that. Consequently, over the next decade, there was a substantial move toward commercial gear. I'm interested in that sort of detail.

Returning to the topic of John Brown, I'd like to hear more about this fellow and those times. We have, I believe, a good deal to learn from history.

73 to you!
Les

25763. Re: [regenrx] Adapted to 6BA6, 6C4 and 6AQ5 or EL84 it is an excellent performing ¨modern¨ regenerative

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-03 21:36:04 UTC
From: Rajaram Bhat
Topic: 25670 Message: 25763

I would greatly appreciate it if Arnie or one of the others who responded to Arnie or anyone else answers my question in an earlier email below.

Thank you.

Raj

> On Jan 31, 2016, at 9:29 PM, Rajaram Bhat rbhat@...m [regenrx] <regenrx@yahoogroups.com> wrote:
>
> Hi Arnie and others:
>
>
> In this group you and others have expressed the need to have a grounded grid first stage along with attenuators. The design you have written about in this email does not have such a feature. Is there not a problem with overloading the detector due to the rf amplifier front end without any attenuators?
>
> Regards,
>
> Raj
>
>
>> On Jan 24, 2016, at 10:23 AM, 'Prof. Arnaldo Coro Antich' coro@... <mailto:coro@...> [regenrx] <regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>> wrote:
>>
>> Si amigo ! Yes my friend , you are absolutely right, and when built
>> many years ago when I was in my late teens it worked very well
>> indeed... Also a super-regenerative from the same period provided
>> my first 6 meters band amateur radio two way contact.
>> The audio section 6J5 - 6V6 was identical on the super-regenerative
>> that used a 955 acorn tube as the detector... and I also built another
>> one using a 6C4 detector, both mounted horizontally to make connections
>> as short as possible...
>> 73 and DX
>> Arnie Coro
>> CO2KK
>>
>>
>

25764. Re: [regenrx] Adapted to 6BA6, 6C4 and 6AQ5 or EL84 it is an excellent performing ¨modern¨ regenerative

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-03 22:33:30 UTC
From: dulmagedon@...
Topic: 25670 Message: 25764

I have a powerhouse regen which has a cathode driven (GG) frontend. overdriving is not a problem with it. It is not though a very good regen design. Fine for SWl ing but almost uselesss for Ham use except in really good conditions. The older I get and the more regens I build I keep going back to one design for tube rigs that is to me superior. The Twinplex and variations there of. All the others work but not any better and rarely as good.That has been my experience so far . I built my first in 1965 I think and my last two weeks ago. donVe3LYX

25765. Re: [regenrx] Adapted to 6BA6, 6C4 and 6AQ5 or EL84 it is an excellent performing Â¨modernÂ¨ regenerat ive

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-03 22:46:50 UTC
From: Leonard Meek
Topic: 25765 Message: 25765

I would think there would be little chance of overloading the detector with a grounded grid amp. The gain is rather low. And besides, a pot in the grid or cathode circuit could attenuate the signal to whatever level you want.

Leonard

----- Original Message -----
From: Rajaram Bhat rbhat@stny.rr.com [regenrx]
To: regenrx@yahoogroups.com
Sent: Wednesday, February 03, 2016 11:36 AM
Subject: Re: [regenrx] Adapted to 6BA6, 6C4 and 6AQ5 or EL84 it is an excellent performing Â¨modernÂ¨ regenerative

I would greatly appreciate it if Arnie or one of the others who responded to Arnie or anyone else answers my question in an earlier email below.

Thank you.

Raj

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Hi Arnie and others:

In this group you and others have expressed the need to have a grounded grid first stage along with attenuators. The design you have written about in this email does not have such a feature. Is there not a problem with overloading the detector due to the rf amplifier front end without any attenuators?

Regards,

Raj

On Jan 24, 2016, at 10:23 AM, 'Prof. Arnaldo Coro Antich' coro@... [regenrx] <regenrx@yahoogroups.com> wrote:

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Arnie Coro
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25766. Re: [regenrx] Adapted to 6BA6, 6C4 and 6AQ5 or EL84 it is an excellent performing ¨modern¨ regenerative

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-03 22:53:08 UTC
From: Rajaram Bhat
Topic: 25765 Message: 25766

I was referring to overloading in the regen design that Arnie posted which did not have a grounded grid amp front end. Amplifying the incoming rf before detection could lead to overloading the detector is it not? Or is this not a serious problem?

Thanks.

Raj

> On Feb 3, 2016, at 5:46 PM, 'Leonard Meek' lemeek@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
>
> I would think there would be little chance of overloading the detector with a grounded grid amp. The gain is rather low. And besides, a pot in the grid or cathode circuit could attenuate the signal to whatever level you want.
>
> Leonard
>
>> ----- Original Message -----
>> From: Rajaram Bhat rbhat@... [regenrx] <mailto:rbhat@... [regenrx]>
>> To: regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>
>> Sent: Wednesday, February 03, 2016 11:36 AM
>> Subject: Re: [regenrx] Adapted to 6BA6, 6C4 and 6AQ5 or EL84 it is an excellent performing Â¨modernÂ¨ regenerative
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>> I would greatly appreciate it if Arnie or one of the others who responded to Arnie or anyone else answers my question in an earlier email below.
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>> Thank you.
>>
>> Raj
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>>
>>> On Jan 31, 2016, at 9:29 PM, Rajaram Bhat rbhat@... <mailto:rbhat@....com> [regenrx] <regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>> wrote:
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>>> Hi Arnie and others:
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>>>> 73 and DX
>>>> Arnie Coro
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>>>>
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>

25767. Re: [regenrx] Re: A Simple Regen Receiver For Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-03 23:41:16 UTC
From: Michael
Topic: 25673 Message: 25767

Any further progress, Suzie?

Michael

On 24.01.16 22:56, Suzie Creamcheeze creamcheeze.suzie@...
[regenrx] wrote:
> . . .I can try replacing the 1K R3 with a 100K resistor and see what
> happens. Now that the receiver is working
> without having an oscilloscope probe attached to it, I can try just
> about anything. This is all a learning experience for me.

25768. Re: [regenrx] Adapted to 6BA6, 6 C4 and 6AQ5 or EL84 it is an exc ellent performing ¨modern¨ regen erative

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-04 01:26:53 UTC
From: Leonard Meek
Topic: 25768 Message: 25768

Raj, I have built several regens with grounded grid and grounded cathode amp front ends and have had good reaults with both. The best result was with a tuned RF amp front end. The detector can be easily overloaded, which is why a means of RF attenuation should be provided. It's easier to reduce a strong signal than to increase a weak signal.

Leonard

----- Original Message -----
From: Rajaram Bhat rbhat@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Wednesday, February 03, 2016 12:53 PM
Subject: Re: [regenrx] Adapted to 6BA6, 6C4 and 6AQ5 or EL84 it is an excellent performing ¨modern¨ regenerative

I was referring to overloading in the regen design that Arnie posted which did not have a grounded grid amp front end. Amplifying the incoming rf before detection could lead to overloading the detector is it not? Or is this not a serious problem?

Thanks.

Raj

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Leonard

----- Original Message -----
From: Rajaram Bhat rbhat@stny.rr.com [regenrx]
To: regenrx@yahoogroups.com
Sent: Wednesday, February 03, 2016 11:36 AM
Subject: Re: [regenrx] Adapted to 6BA6, 6C4 and 6AQ5 or EL84 it is an excellent performing Â¨modernÂ¨ regenerative

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Regards,

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The audio section 6J5 - 6V6 was identical on the super-regenerative
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as short as possible...
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Arnie Coro
CO2KK

25769. Re: [regenrx] Adapted to 6BA6, 6C4 and 6AQ5 or EL84 it is an excellent performing ¨modern¨ regenerative

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-04 01:45:39 UTC
From: Rajaram Bhat
Topic: 25768 Message: 25769

Leonard:

Thanks. That is useful info.

Raj

> On Feb 3, 2016, at 8:26 PM, 'Leonard Meek' lemeek@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
> □
>
> Raj, I have built several regens with grounded grid and grounded cathode amp front ends and have had good reaults with both. The best result was with a tuned RF amp front end. The detector can be easily overloaded, which is why a means of RF attenuation should be provided. It's easier to reduce a strong signal than to increase a weak signal.
>
> Leonard

25770. Re: [regenrx] Adapted to 6BA6, 6C4 and 6AQ5 or EL84 it is an excellent performing ¨modern¨ regenerative

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-04 04:05:04 UTC
From: Prof. Arnaldo Coro Antich
Topic: 25768 Message: 25770

A very simple input attenuator.... just a 1000 ohms linear carbon
potentiometer
one leg to ground.... the center to the grid of the RF amplifier stage via
a small ceramic capacitor , and the top connection goes to the coax
cable center conductor...
The RF amplifier UNTUNED.... a triode....
ground the cathode....
a grid resistor of 10,000 to 33000 ohms (not critical at all)
the plate goes to B plus voltage via a 100 kilo-ohms resistor
and the output is coupled to the antenna coil of the regenerative
detector via a small capacitor....
You can also try a grounded grid RF amplifier....
My best direct regenerative, not a regenerodyne uses a RF amplifier
stage, one Hartley type regenerative detector with screen grid
regeneration control.... and a dual tube for audio, half a triode
and the other half a tetrode... that is a 6BM8/ECL82...
Coils are hand wound for frequencies from 500 kiloHertz to about
20 megaHertz....
Hope this helps...
73 and DX
Arnie Coro
CO2KK

On 03/02/16 20:45, Rajaram Bhat rbhat@... [regenrx] wrote:
>
>
> Leonard:
>
> Thanks. That is useful info.
>
> Raj
>
>> On Feb 3, 2016, at 8:26 PM, 'Leonard Meek' lemeek@...
>> <mailto:lemeek@...> [regenrx] <regenrx@yahoogroups.com
>> <mailto:regenrx@yahoogroups.com>> wrote:
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>> weak signal.
>> Leonard
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25771. Re: [regenrx] Adapted to 6BA6, 6C4 and 6AQ5 or EL84 it is an excellent performing ¨modern¨ regenerative

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-04 04:11:46 UTC
From: Rajaram Bhat
Topic: 25768 Message: 25771

Thank you Arnie.

Raj

> On Feb 3, 2016, at 11:05 PM, 'Prof. Arnaldo Coro Antich' coro@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
> A very simple input attenuator.... just a 1000 ohms linear carbon potentiometer
> one leg to ground.... the center to the grid of the RF amplifier stage via
> a small ceramic capacitor , and the top connection goes to the coax
> cable center conductor...
> The RF amplifier UNTUNED.... a triode....
> ground the cathode....
> a grid resistor of 10,000 to 33000 ohms (not critical at all)
> the plate goes to B plus voltage via a 100 kilo-ohms resistor
> and the output is coupled to the antenna coil of the regenerative
> detector via a small capacitor....
> You can also try a grounded grid RF amplifier....
> My best direct regenerative, not a regenerodyne uses a RF amplifier
> stage, one Hartley type regenerative detector with screen grid
> regeneration control.... and a dual tube for audio, half a triode
> and the other half a tetrode... that is a 6BM8/ECL82...
> Coils are hand wound for frequencies from 500 kiloHertz to about
> 20 megaHertz....
> Hope this helps...
> 73 and DX
> Arnie Coro
> CO2KK
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> On 03/02/16 20:45, Rajaram Bhat rbhat@... <mailto:rbhat@...> [regenrx] wrote:
>> Leonard:
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>> Thanks. That is useful info.
>>
>> Raj
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>>> On Feb 3, 2016, at 8:26 PM, 'Leonard Meek' <mailto:lemeek@...>lemeek@... <mailto:lemeek@...> [regenrx] <regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>> wrote:
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why a means of RF attenuation should be provided. It's easier to reduce a strong signal than to increase a weak signal.
>>>
>>> Leonard
>>
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>
>

25772. Re: [regenrx] Re: A Simple Regen Receiver For Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-04 14:42:36 UTC
From: Suzie Creamcheeze
Topic: 25673 Message: 25772
Attachments: 3 described; binary payloads are missing from this source WARC

On Wed, Feb 3, 2016 at 6:41 PM, Michael michael.setaazul@...
[regenrx] <regenrx@yahoogroups.com> wrote:
>
> Any further progress, Suzie?
>
> Michael
>

Dear Michael,

I have "finished" the Simple Regen Radio For Beginners (if a home-made radio can ever be really "finished"?). I worked on the Front Panel. I attached a ten foot piece of wire to the circuit board (as a counterpoise to the 39-inch wire antenna). I also attached a wire from the circuit board to the Front Panel. Here are a couple of snapshots of my first Regen Receiver.

The knobs are (from Left to Right) Fine Tuning, Regen, Volume, and Main Tuning. The ON/OFF switch is on the left side.

The Pill Bottle is 1.25 inches in diameter. It is attached to the circuit board with a #6-32 brass machine screw and nut. The Main Tuning capacitor is a 365pF air variable capacitor, purchased from Antique Electronic Supply (https://www.tubesandmore.com/). It is the most expensive component in the radio. The battery clip is also attached to the circuit board with a #6-32 brass machine screw and nut. The standoffs are plastic cylinders from Dental Floss.

This was a fun radio to build. I started off with the schematic from the PDF article, and slowly transformed it into a layout for Manhattan Style Construction. All of the layout work was done in a graphics program called Kolourpaint, which is VERY easy to use, and has all the tools needed for doing this type of drawing. Here is the final layout (including the FIX I used to make my radio work).

The farthest station I have been able to hear with this radio, using the 39-inch wire antenna is Radio Havana Cuba at 6000 kHz. I consider this first Regen Radio build to be a success.

At this time I am working on the layout for a "Desert Ratt 2" Regen Receiver. I think I am hooked on Regen Receivers for the foreseeable future.

Sincerely,
SC

25773. Re: [regenrx] Re: A Simple Regen Receiver For Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-04 16:53:12 UTC
From: Michael
Topic: 25673 Message: 25773

Good to know, Suzie! Did you notice whether R3 was better as a 1K or
100K resistor?
Once you get "bitten" you will certainly want to try all the
best-reviewed regen designs.
The Desert Ratt is anoather tried-and-tested design.

Michael

On 04.02.16 14:42, Suzie Creamcheeze creamcheeze.suzie@...
[regenrx] wrote
This was a fun radio to build. I started off with the schematic from the
PDF article, and slowly transformed it into a layout for Manhattan Style
Construction. All of the layout work was done in a graphics program
called Kolourpaint, which is VERY easy to use, and has all the tools
needed for doing this type of drawing.

At this time I am working on the layout for a "Desert Ratt 2" Regen
Receiver. I think I am hooked on Regen Receivers for the foreseeable future.

25774. Re: [regenrx] Re: A Simple Regen Receiver For Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-04 18:00:12 UTC
From: Suzie Creamcheeze
Topic: 25673 Message: 25774

On Thu, Feb 4, 2016 at 11:53 AM, Michael
michael.setaazul@... [regenrx] <regenrx@yahoogroups.com>
wrote:
>
> Good to know, Suzie! Did you notice whether R3 was better as a 1K or
> 100K resistor?
> Once you get "bitten" you will certainly want to try all the
> best-reviewed regen designs.
> The Desert Ratt is anoather tried-and-tested design.
>
> Michael
>

Dear Michael,

Oh My Goodness, I have a whole list of things to try out on that radio, but I haven't gotten around to any of them, yet.

I am already drawing the Manhattan Style Construction layout for the Desert Ratt 2. I have decided to follow Dave Richards' (AA7EE) version of the DR2. I like the idea of trying the reduction drive that he uses for the Main Tuning air-variable capacitor. I'm not sure I will be able to find all of the same parts as he did for his DR2, so my version will probably be slightly different.

It took me about three weeks to draw the layout for the Simple Regen Receiver For Beginners. After the layout was finished, it took me just a few days to construct it. So I am accustomed to spending a long time drawing a circuit. I enjoy drawing.

BTW, that radio was the third circuit I have made using Manhattan Style Construction, and it was much much larger than either of the first two. This next radio will be the fourth circuit I have built using MSC. I like MSC for two main reasons: no etching, and no drilling holes for components. The only holes I had to drill in the circuit board were for the brass woodscrews for the standoffs.

In the past, I have etched my own circuit boards, and drilled the holes for components, and it is a mess and a bother.

If I may ask, what are your favorite Solid State Regenerative Receiver designs?

Sincerely,
SC

25775. Re: [regenrx] Re: A Simple Regen Receiver For Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-04 20:12:49 UTC
From: wb8yyy@...
Topic: 25673 Message: 25775

Nice work -- a couple other fun solid state regens to feed your addiction --

Ozark Patrol -- I did mine homebrew from the 4stateQRP schematic. nice result from 3 NPNs -- its barely more complex than the old Radio Shack regen but the simple reflex circuit sounds much better than any of my old portable superhets

Wheatstone Bridge Receiver -- nice 40m ham band receiver -- its detector is narrow band but has nice bandspread to separate CW signals or SSB

73 Curt

25776. QRP RADIO BUILDERS CONFERENCE APRIL 1-2 Branson MO

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-04 21:20:03 UTC
From: Jim Scott
Topic: 25776 Message: 25776

Speaking of upcoming conferences.

Ozarkcon will be held in Branson the weekend of April 1-2, 2016. This conference is for anyone interested in the art of radio.

Besides a build session on Friday, this year the lineup of programs Saturday includes Regens, Phasing receiver construction, and the Raspberry Pi Software Defined Radios. The club will have kits for sale as well. See the website for more information. The hotel is $70/night at the conference.
The Four State QRP group puts this on, and there you will meet many hobbiests who are avid builders in the world of QRP.
http://www.ozarkcon.com/index.php

73,

Jim Scott
WB0IYC
Life Member ARRL
FISTS 15327
Joplin, MO EM27
http://www.wb0iyc.com

The whole universe is waiting...
http://www.jpl.nasa.gov/

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25777. Re: [regenrx] Re: A Simple Regen Receiver For Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-04 21:23:44 UTC
From: Suzie Creamcheeze
Topic: 25673 Message: 25777

On Thu, Feb 4, 2016 at 3:12 PM, wb8yyy@... [regenrx]
<regenrx@yahoogroups.com> wrote:
>
>
> Nice work -- a couple other fun solid state regens to feed your addiction --
>
> Ozark Patrol -- I did mine homebrew from the 4stateQRP schematic. nice
> result from 3 NPNs -- its barely more complex than the old Radio Shack regen
> but the simple reflex circuit sounds much better than any of my old portable
> superhets
>
> Wheatstone Bridge Receiver -- nice 40m ham band receiver -- its detector is
> narrow band but has nice bandspread to separate CW signals or SSB
>
> 73 Curt
>

Dear Curt,

I am familiar with the WBR from Dave Richards (AA7EE) blog. The
other day I found a PDF copy of the August 2001 QST article by Dan
Wissell, N1BYT.

I will have to look up the Ozark Patrol, and see if I can find the
schematic. It sounds like a good one.

Thank you very much for the Solid State Regen Receiver recommendations.

Sincerely,
SC

25778. Re: [regenrx] Re: A Simple Regen Receiver For Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-04 21:31:19 UTC
From: Bob
Topic: 25673 Message: 25778

Suzie
Well done on your Regen receiver, a very nice build.

> The Main Tuning capacitor is a 365pF air variable capacitor, purchased
> from Antique Electronic Supply. It is the most expensive component in
> the radio.
If you have a Ham Radio club in your area it may well be worth a visit
as a lot of members will probably have lots of components collected over
the years that they would give you or sell to you cheaply.
I for one have a number of toy boxes, full of components, that I will
never empty in my life time.

Bob VK7ZL

25779. Re: [regenrx] Re: A Simple Regen Receiver For Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-04 21:54:47 UTC
From: Suzie Creamcheeze
Topic: 25673 Message: 25779

On Thu, Feb 4, 2016 at 4:31 PM, Bob vk7zl@... [regenrx]
<regenrx@yahoogroups.com> wrote:
>
> Suzie
> Well done on your Regen receiver, a very nice build.
>

Dear Bob,

Thank you very much for your kind words. (^_^)

>
> If you have a Ham Radio club in your area it may well be worth a visit
> as a lot of members will probably have lots of components collected over
> the years that they would give you or sell to you cheaply.
> I for one have a number of toy boxes, full of components, that I will
> never empty in my life time.
>
> Bob VK7ZL
>

That is a good idea.

I am coming to the "homebrew" radio communities after hovering around
the fringes of the DIY Synth communities for a little while. I love to
make noise.

I have also tinkered with small toy robots, controlled by Arduinos.
Actually, it was Arduinos that got me interested in hobby electronics.
They were designed for Artists, Designers, and Hobbyists, and I have a
background in Art. I never thought that I would ever be making
electronics projects of ANY kind, much less building radios.

Thank you very much for your suggestions.

Sincerely,
SC

25780. Re: [regenrx] Re: A Simple Regen Receiver For Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-04 23:32:31 UTC
From: Michael
Topic: 25673 Message: 25780

On 04.02.16 18:00, Suzie Creamcheeze creamcheeze.suzie@...
[regenrx] wrote:
>
> If I may ask, what are your favorite Solid State Regenerative Receiver
> designs?
>

Suzie, the Ozark Patrol is a good one. The WBR is a little more
difficult to build,
but likewise a proven design. Others include the previously mentioned
F5LVG /
VK3YE high-performance regen, and those of 7EW5JH and VE3LYX
(slug-regen) and
not least a number of others in this group's files. Doubtless other
members will
have further suggestions. (I have more experience with valve/tube regens.)

Manhatten-style construction is well-suited to experimentation. Similarly,
10meg resistors soldered to a copper base can be used as stand-off pillars.

Michael
>

25781. Re: [regenrx] Re: A Simple Regen Receiver For Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-05 14:55:02 UTC
From: Suzie Creamcheeze
Topic: 25673 Message: 25781

On Thu, Feb 4, 2016 at 6:32 PM, Michael
michael.setaazul@... [regenrx] <regenrx@yahoogroups.com>
wrote:
>>
>> On 04.02.16 18:00, Suzie Creamcheeze creamcheeze.suzie@... [regenrx] wrote:
>>
>> If I may ask, what are your favorite Solid State Regenerative Receiver designs?
>>
>
> Suzie, the Ozark Patrol is a good one. The WBR is a little more difficult to build,
> but likewise a proven design.

Dear Michael,

Thank you very much for your reply. Dave Richards puts it very
succinctly when he said:

"Like anyone who builds circuits, I have a mental list of things that
I'd like to build which is updated constantly. Some ideas get pushed
to the back of the queue to make way for newer ones, and some stay
pretty close to the front for long enough that eventually opportunity
and desire collide and magically, it gets made."
https://aa7ee.wordpress.com/2011/07/24/the-wbr-a-simple-high-performance-regen-receiver-fo
r-40m-by-n1byt/

I found the Ozark Patrol Kit web page, which included a schematic. As
is my habit, whenever I find a circuit on the Internet, I then go to
YouTube and see if anyone has published a video of the circuit. I
found several videos for the Ozark Patrol, and the kit looks
beautiful. I do not have much experience with kits, but I have put
together a couple of beautiful kits, from Evil Mad Scientist
Laboratories; the "Three Fives" kit, and the "XL741 Discreet Op-Amp"
kit.

Speaking of kits .... I have looked at the MFJ-8100K WORLD BAND SWL
RECEIVER-KIT ($79.95 each)
http://www.mfjenterprises.com/Product.php?productid=MFJ-8100K
I would have to save up for a kit that expensive, but in general, the
reviews for it seem to be very positive.

I also found the PDF article for the WBR, and I am also familiar with
Dave Richards' web pages about it. I think that I might try to build a
WBR after I finish the Desert Ratt 2.

>
> Others include the previously mentioned F5LVG /
> VK3YE high-performance regen, and those of 7EW5JH and VE3LYX (slug-regen) and

> not least a number of others in this group's files. Doubtless other members will
> have further suggestions. (I have more experience with valve/tube regens.)
>

I have seen some valve/tube regens on the Internet, but I am not interested in building anything with vacuum tubes at this point in time. I do not have ANY experience with vacuum tubes, and from what I have heard, they use high voltages, get hot, and can be lethal.

I have asked someone else why they wanted to build vacuum tube circuits, and they replied that the tube circuits (guitar amps in their case) had a nostalgic attraction, among other things. They liked the smell, and the tubes warming up, and they said the sound was better, and so forth. Personally, I do NOT have anything to get nostalgic about with vacuum tubes. They were way before my time. I have seen pictures of them on the Internet. (^_^)

>
> Manhatten-style construction is well-suited to experimentation. Similarly,
> 10meg resistors soldered to a copper base can be used as stand-off pillars.
>
> Michael
>

Yes, I am enjoying building circuits with Manhattan Style Construction. There is a similar type of construction called "Muppet Construction" that I would like to try one day.

Manhattan-Ugly-Professional Placement Experimental Technique by Chuck Adams (K7QO).
http://soldersmoke.blogspot.com/2013/04/chuck-adams-muppet-construction.html

I have not had a chance to look at the Files section of this regenrx group, yet. I look forward to getting a chance to see what is in there.

Sincerely,
SC

25782. Re: A Simple Regen Receiver For Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-05 14:44:27 UTC
From: wa4chq@...
Topic: 25673 Message: 25782

SC, sounds like you are having fun with your regen project. I was hoping to see pictures that you posted but for some reason, I'm not getting them. Is anyone else not seeing them? tnx

25783. Re: [regenrx] Re: A Simple Regen Receiver For Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-05 19:24:51 UTC
From: Suzie Creamcheeze
Topic: 25673 Message: 25783

On Fri, Feb 5, 2016 at 9:44 AM, wa4chq@... [regenrx]
<regenrx@yahoogroups.com> wrote:
>
> SC, sounds like you are having fun with your regen project. I was hoping to see pictures that you posted but for some reason, I'm not getting them. Is anyone else not seeing them?
> tnx
>

Dear wa4chq,

I have been placing the images inline with my emails, not attached.
If there is another (preferred?) way to do this, please let me know.

Sincerely,
SC

25784. Re: [regenrx] Re: A Simple Regen Receiver For Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-05 19:36:07 UTC
From: wa4chq@...
Topic: 25673 Message: 25784

Hi SC....I imagine what you are doing is just fine. It could be because I have my subscription set up to not have posts emailed to me....I just look at the posts when I log in to the groups. Sometimes I see attachments other times I don't. I noticed that you've finished it and are now working on the Desert Rat2....how did your first regen perform? Were you able to copy cw/ssb sigs?
Tnx and best 73 de Neil wa4chq

25785. Re: [regenrx] Re: A Simple Regen Receiver For Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-05 21:16:17 UTC
From: Suzie Creamcheeze
Topic: 25673 Message: 25785

On Fri, Feb 5, 2016 at 2:36 PM, wa4chq@... [regenrx]
<regenrx@yahoogroups.com> wrote:
>
> Hi SC....I imagine what you are doing is just fine. It could be because I have my subscription set up to not have posts emailed to me....I just look at the posts when I log in to the groups. Sometimes I see attachments other times I don't. I noticed that you've finished it and are now working on the Desert Rat2....how did your first regen perform? Were you able to copy cw/ssb sigs?
> Tnx and best 73 de Neil wa4chq
>

Dear Neil,

My first regen radio, the Simple Regen Receiver For Beginners, by Charles Kitchin, N1TEV, is as "finished" as it will get? I have a list of things I can do to it for experimental purposes. As far as I know, it performs as advertised, but I do not have any other Shortwave Receiver to compare it to at this time. Hopefully, the Desert Ratt 2 that I am currently working on, will work well enough to have something to compare this first regen to.

I think I have heard some Morse Code on it, but I am not really sure, as I do not know Morse Code at this time. It was high pitched "chirping" that sounded like it might have been VERY fast dots and dashes? I have looked into learning Morse Code, but I have not done anything about actually learning it. I know SOS. (^_^)

I don't think I have heard any SSB? I gather that is what Amateur Radio operators use when they communicate with each other? I am not a "Ham" at this time. I have looked into Ham Radio, but I have not yet done anything about it. I am not too keen on "transmitting" anything to anyone at this time, so I don't think I need a license.

The Short Wave Listening (SWL) hobby is something that I am very interested in, thus my interest in building Shortwave Receivers. These Regen Receivers are supposed to be good radios to build, in order to learn how to build radio receivers. Eventually, I will probably try other types of receivers as well, such as Direct Conversion, and Super Heterodyne receivers. I am really fascinated with Dave Richards' (AA7EE) Sproutie Mk II Regen Receiver which is, in my opinion, a beautiful radio. I aspire to someday build a radio as beautiful (and functional) as the Sproutie.
https://www.youtube.com/watch?v=5TRlfSAswuE

All the best,
SC

25786. Re: [regenrx] Re: A Simple Regen Receiver For Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-06 13:18:41 UTC
From: wb8yyy@...
Topic: 25673 Message: 25786

Suzie

If you are receiving am signals with that regen most likely it will do cw and ssb. The spectrum around 7 MHz has all these types of signals. If you are tuning around am you may come to a voice that sounds fuzzier. The regen control then needs to be adjusted and with care it can be tuned in. Cw has constant pitch and slow enough to hear a pattern. Maybe curiousity will encourage you to learn it. That signal you described may be radio teletype or another type of signal created from a computer.

73 Curt

25787. Re: [regenrx] Re: National SW3 Model III

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-06 14:00:33 UTC
From: wd4nka@...
Topic: 25721 Message: 25787

Been building regens since my first '30 Lowfer and my '76 BCB rig. Then my first Amateur receiver used for 80m, a straight-out-of-the-Handbook 6SN7 Twinplex. I can honestly say that never once has there been a "re-radiation" issue, even without an RF stage save once....which may or may not have been even me. It was never established, but...

One night during the winter of 1981 I wound some coils for 160m and link coupled the 6SN7 detector to my 40m dipole. It was very early morning, and I fell asleep listening to a QSO. My hand must have swept across the front panel because when I awoke, my regeneration control was full on, maximum. I brought the regeneration back to it's normal threshold position and listened. Nothing...for a few seconds, then the words "Thank You".

Then nothing. No other station was there. The transmission did not identify itself. It was on the frequency from which I was listening to the QSO the night before, it was a side-band signal. I could have chanced upon the end of a qso. Or...I suppose I could have been emitting a couple milliwatt signal on 1850 all night, I don't know.

I have actually tried to get a signal out onto a resonant antenna....and some cases a non resonant non loading antenna...via a properly built and operated regen. I have had hams far and near, good friends who were willing to participate, try their dangdest to copy my receiver at any point beyond the operating desk. Never once.

I had a couple good friends that worked with the A-school guys during WW2, and one of my students was a former "sparks" aboard the USNS Butterfly, that sub that was out on patrol during the Pearl Harbor attack. NR4D is a most interesting guy, 90 years old, and free jumps with the DeLand jump club, but I digress (his kids won't let him jump alone anymore. I think jumping is his response to his sub duty in the 40s!)

Ed says that regens were not an issue because during his tenure the problem child was RADAR in the field. It worked more in favour for the enemy than for the US Navy! Almost always they had to keep it off when submerged because the Japanese had become quite adept at zeroing on their positions by the radar pings. The Navy did have regen sets, many of which were failsafe rigs, but certainly called upon for use. He never heard of the issues assigned to them in these modern times.

But everyone has their own experience, I'll not deny or contradict anyone on the subject or interference from Regens save to say that ANY radio improperly built, operated, and especially both, can be a big bag of worms on many levels. In fact, there was ONE rig that did pose a detectable signal.....a DC rig. Who'da thunk? That LO managed to couple itself nicely to a resonant antenna and was picked up by WD4NFU at a distance of eight miles. Dang! Wish I could get that kinda thing going when intentionally working QRP!!

If Regens cause as much radiative interference as I have heard over the past 44 years....why is QRP then such a danged challenge?? <grin>

Dave: Wireless Age magazine from the 1916-1918 period records the reception of signals sent between decks of the dreadnoughts of the Kaiser's Kriegsmarine from bases along the SE and SW coasts of Great Britain. The sparks made by the make and breaks of the keys aboard the

ships, sent to various other parts of the ships, in particular to the engine rooms, are recorded as being intercepted across the channel via the newly acquired valve regen sets (?). I have heard no latter or subsquent commentary to substantiate the contemporary claim, it may have been buried in obscurity by far more interesting Great War trivia.

Anywhoo....that's my 2d. worth.

-gary // wd4nka

25788. Re: A Simple Regen Receiver For Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-06 17:22:50 UTC
From: wa4chq@...
Topic: 25673 Message: 25788

Thanks Suzie....I have looked at Dave's stuff and tried making the WBR. I had audio but could never get the regeneration to kick in properly. I took it apart and assembled it three times....maybe a bad part? Pilot error....? I looked at the Desert Rat2 but according to Dave, it doesn't receive cw/ssb well mainly for SWL. I'd like to be able to copy cw on my regen if I build another one. Before getting my ham license in 1972, I built a single tube regen that worked the first time..... in fact, I still have it but needs to be cleaned up a bit. The regen that also caught my interest is the regen using ceramic resonators that Peter Parker came up with. All right, all the best.
Neil wa4chq

25789. Re: [regenrx] Re: A Simple Regen Receiver For Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-06 17:56:49 UTC
From: Suzie Creamcheeze
Topic: 25673 Message: 25789

On Sat, Feb 6, 2016 at 8:18 AM, wb8yyy@... [regenrx]
<regenrx@yahoogroups.com> wrote:
>
> Suzie
>
> If you are receiving am signals with that regen most likely it will do cw and ssb. The spectrum around 7 MHz has all these types of signals. If you are tuning around am you may come to a voice that sounds fuzzier. The regen control then needs to be adjusted and with care it can be tuned in. Cw has constant pitch and slow enough to hear a pattern. Maybe curiousity will encourage you to learn it. That signal you described may be radio teletype or another type of signal created from a computer.
>
> 73 Curt

Dear Curt,

There seem to be many variables as to which stations this radio receiver picks up. When I was first trying to get the radio working without the oscilloscope being attached to it, the first suggestion I tried was a 100pF capacitor connected to the cathode of the germanium diode and the ground plane. That "fix" pulled in completely different stations than the 1M Ohm resistor which replaced the 100pF capacitor.

Another "experiment" on my list of things to try with this first radio is to replace the 1M Ohm resistor with a 2.2M, 4.7M, or higher Ohm resistor and see what happens. Also, the original article suggests putting a capacitor with a switch on it, in parallel with the air-variable capacitor, in order to switch bands.

I am thinking about making a small circuit board that has sockets that I could plug different components into, that has a switch on it, and so forth, so that I could just solder the small circuit board to the radio, and do all sorts of "experiments" without having to solder/unsolder so many times. I don't know if that kind of idea would work, or not, but I guess the onjly way to find out would be to try it. I have a DIP switch that I could use, and I could certainly etch a small circuit board to take sockets and a DIP switch.

I am currently reading "Experimental Methods in RF Design" by Wes Hayward, et al. I just got the book, and I am still in Chapter One, but there are some good suggestions about "experimenting" with a new radio build. As I have mentioned, I am already working on the layout for the "Desert Ratt 2." EMRFD recommends doing "experiments" with a new radio rather than trying it out briefly, putting it on the shelf, then starting a new project (which is exactly what I have done). So I may have to warm up my 25W SP-23 Weller soldering iron, and do some

more "experiments" on this Simple Regen, before I really get into the DR2.

I have read on the Internet that it is best to tune the Regen knob until it is just oscillating to get a good SSB signal? Whereas, the best results for an AM signal is to get the oscillation to just stop. I am learning how to tune my Regen Radio. It takes practice. I am getting better at it, the more I "practice."

Sincerely,
SC

25790. Re: [regenrx] Re: A Simple Regen Receiver For Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-06 18:27:42 UTC
From: Suzie Creamcheeze
Topic: 25673 Message: 25790

On Sat, Feb 6, 2016 at 12:22 PM, wa4chq@... [regenrx]
<regenrx@yahoogroups.com> wrote:
>
> Thanks Suzie....I have looked at Dave's stuff and tried making the WBR. I
> had audio but could never get the regeneration to kick in properly. I took
> it apart and assembled it three times....maybe a bad part? Pilot error....?
>

Dear Neil,

The problem that I had with the Simple Regen Receiver For Beginners is
that I could not get any oscillation without the oscilloscope attached
to the cathode of the germanium diode (D1). At least I was able to get
SOME feedback, eventually. Once I had some feedback, then I could try
to connect different components to D1 to compensate for the 10X scope
probe. Mind you, I am brand new to using an oscilloscope (and
learning how to spell it) so I was really just poking around with a
probe without really knowing what I was doing. I guess I just lucked
out? OMG, I know, right? (^_^)

>
> I looked at the Desert Rat2 but according to Dave, it doesn't receive cw/ssb
> well mainly for SWL. I'd like to be able to copy cw on my regen if I build
> another one.

I read the same thing about the DR2 on Dave's DR2 web page. That does
not stop me from wanting to make one. I also read many horrible
reviews of the Simple Regen Receivers For Beginners, but I built it as
my "first" Regen Receiver because there were just as many positive
reviews of it. The thing that inspires me to go ahead and build a DR2
are the videos that Dave has published on YouTube. I think there is a
lot for me to learn by building a DR2.

It seems there are 10 types of people on the Internet with an opinion
about Regen Receivers: those who Hate them, and those who Love them.
So far, I can put myself in the later category. (^_^)

>
> Before getting my ham license in 1972, I built a single tube
> regen that worked the first time..... in fact, I still have it but needs to
> be cleaned up a bit. The regen that also caught my interest is the regen
> using ceramic resonators that Peter Parker came up with. All right, all the
> best.
> Neil wa4chq
>

I keep running across plans and kits for vacuum tube Regen Receivers on the Internet, but so far, I have only looked at Solid State designs. I just don't have any experience AT ALL with vacuum tubes. Except for pictures on the Internet, I have never even seen a vacuum tube (or "valve" as the British are fond of saying).

I am currently reading "Experimental Methods in RF Design" by Wes Hayward, et al. I am still in the first chapter. Actually, I am bookmarked at a design for a FET Regen Receiver. I wonder if anyone has built the EMRFD FET Regen Receiver? Do you call it something else? I think I have some J113 N-channel FET transistors in my junk box. If I remember correctly, I got them as a replacement for MPF102 transistors, to build a small audio Amp.

OMG, there is SO much to learn. It boggles my mind. Inductors, coils, toroids, ferrite rods, and other esoteric things are still a big mystery to me. (I am still surprised that the hand-wound coil I made for my first Regen, "worked.") I will be working through EMRFD, as well as building Regen Radio projects, and learning, learning, learning, for the foreseeable future. This is a good hobby: electronics + radio. I just wish I had more time to spend on it, rather than doing it here and there, as time permits. (^_^)

All the Best,
SC

25792. Re: [regenrx] Re: A Simple Regen Receiver For Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-06 22:59:27 UTC
From: Suzie Creamcheeze
Topic: 25673 Message: 25792

On Sat, Feb 6, 2016 at 1:35 PM, Phil ko6bb1@... [regenrx]
<regenrx@yahoogroups.com> wrote:
>
> Hi Suzie,
> Welcome to the fascinating world of radio and electronics construction.
> I've been "doing" radio (all aspects of it) since I was about 10. I
> won't tell you how old I am, but I've been at it over 60 years ;-) I've
> built, repaired, tore up, bought, sold literally hundreds of radios in
> that time. Anyway, I digress (you know how us old folks are).
>

Dear Phil KO6BB,

Thank you very much for your warm welcome. (^_^)

>
> Something I've used off and on over the years is a solderless
> breadboard. There's been one in my arsenal of tools for as long as I
> can remember, and I just recently bought two more (cheaper brand) from
> Amazon. They can say you a LOT of work just to see if something works
> as you wish.

I am familiar with solderless breadboards, and I tried to use one to get the Simple Regen Receiver For Beginners working before I built it on a circuit board. I was NOT able to get it working on the solderless breadboard, but it turned out to be a very good PINCUSHION for components when I built the circuit using Manhattan Style Construction. (^_^)

I have had varied success with solderless breadboards in the two years that I have been an electronics hobbyist. The first one I ever bought was a 340 tie-point breadboard from Radio Shack. It has been a solid performer over the last two years. It was very expensive. I think I paid something like $9.95 for it. However, it is still working great.

The next breadboard I bought was an 830 tie-point breadboard from Adafruit. That breadboard turned out to be BAD. I did not discover how bad it was until I tore off the adhesive backing, and saw cold-shuts in the plastic, which caused a short. The short took me long time to find because I was a raw beginner and I did not suspect the breadboard.

I have also purchased breadboards from Amazon.Com. I thought I was doing good because they were supposed to be from BusBoard Prototypes. It turns out that they were counterfeit boards being sold by an unscrupulous vendor under the name of BusBoard Prototypes. I finally got some real BusBoard Prototype Systems 830 tie-point solderless

breadboards from Mouser. I don't care if I have to pay more. The difference in quality is amazing. Sorry I went on like this, but I will no longer buy cheap solderless breadboards, ever, ever, again. I currently own 6 real BusBoard Prototpe Systems 830 tie-point solderless breadboards, and currently, all of them have circuits on them (mainly synth circuits).

How do I know that the Amazon.Com "BusBoard Prototype" breadboards were counterfeit? When I received the real BusBoard Prototype Systems breadboards from Mouser, I noticed a huge difference between the Mouser breadboards and the Amazon.Com breadboards. The board layouts were different, and the components inserted with a different amount of force. So I wrote an email to the BusBoard Prototype Systems company, and asked them how to identify a "real" BBPS solderless breadboard. They replied with a detailed description of how to spot a counterfeit, and sure enough, the Amazon.Com boards were counterfeit.

>
> This time I also bought a bunch of ready-made wire jumpers
> as it saves having to locate solid wire, tin it and so forth (I'm
> getting lazy).
>

How do you like the ready-made jumper wires? I still use custom-cut lengths of 22 AWG Solid Core Hook-up wire with a quarter-inch stripped off each end. I got a really good deal on hook-up wire when the Radio Shack went out of business, and closed their store at The Mall. (^_^)

>
> I used to spend hours pulling parts off of old TV and
> radio circuit boards (and others) just to have the parts. Now I have
> bought a number of "parts kits", a big box of 1/2W resistors, another
> box of 1W resistors, and a BIG box of 1/4W resistors, along with
> capacitor kits, a bunch of IC sockets and more.
>

I started off with a CK-1000 Electronics Kit. I still have parts from that kit. Now, I try to order the parts I need for a project from Mouser, DigiKey, or Newark/element14. However, I have purchased old AM/FM radios to see if they have air-variable capacitors in them. I actually found one the other day. I paid $2.00 + tax for it. It was a SoundDesign AM-FM-8-track system from the 1980s. It has all sorts of big components in it, an air-variable capacitor, a ferrite rod, plus other goodies. Most of the other radios have plastic variable capacitors. I found an old TV on the curb the other day and talked my Dad into helping me get it home. I was disappointed that it didn't have too many useful parts, that I can tell. I took it apart outside. I was looking for toroids, and things like that. Nothing like that at all. It did yield a 25 Ohm speaker. I can use that in an audio project. Am I chattering away here, or what? Sorry I am such a chatterbox. (^_^)

>
> Anytime I see a 'kit' of stuff on Amazon at a CHEAP price and I think I
> can use it, I order it while I'm getting something else I need (Often
> Amazon has what they call "Add-On" stuff that's so cheap I can't pass it
> up <evil grin>.
>

I used to order electronics from Amazon.Com all the time, but now I'm
getting leery of their stuff. They never have enough information about
the specifications of the components. They are good for books, and
that is all, as far as *I* am concerned. As far as electronics go, I
have had to "return for refund" just about one thing per order. They
are good about refunds, but I would rather that they replace the bad
stuff, not just refund it. Then I have to wait to get another $35
order together (to get free shipping) so I can re-order the thing that
I got a refund for.

I don't shop at E-bay either because my Dad had a bad experience with
them, several years ago, and he is the one with the credit card, and
he will never do anything with PayPal ever again. What can one do?
(^_^)

>
> And yes, being on SS I'm on a very tight budget, but found this a cost
> effective way to do things. If you look around you might even find them
> cheaper, but these are the ones I chose. Some of it comes from Amazon,
> some shipped direct from China. I've found the stuff from China usually
> takes 2-3 weeks, sometimes faster (even though they say it may take longer).
>

I have also been surprised at how fast things ordered from China
through Amazon.Com arrive in my mailbox. I have heard that their
Government subsidizes the mail? Anyway, here again, when I think I am
getting a "good" deal from a Chinese seller on Amazon.Com, I have been
disappointed in the overall quality of the components, compared to
similar components ordered through Mouser, DigiKey, or
Newark/element14. I think this has to do with the poor specifications
of components at Amazon.Com? For example, the leads on components from
China/Amazon.Com are extremely thin, and the leads from similar
components from Mouser are much thicker. It makes a big difference
when sticking them in solderless breadboards, don't you think?

>
> Here are links to those Breadboards and Wire Jumpers.
> http://www.amazon.com/gp/product/B005GYATUG?psc=1&redirect=true&ref_=oh_aui_detailpage_o
03_s00
>
> http://www.amazon.com/gp/product/B017GA3UFI?psc=1&redirect=true&ref_=oh_aui_detailpage_o
06_s00
>
> 73 From "The Beaconeer's Lair"
> Phil, KO6BB

> http://www.qsl.net/ko6bb/ (Web Page)
>

I know that I am just a beginner at all this, but I try to pay attention to EVERYTHING I do. I don't make a lot of money working part-time, so I try to be VERY careful with the money that I do make. I wish the job market were better, and that there were more, better-paying jobs available, but there aren't, and it isn't, so why am I crying about it?

I am having fun with Hobby Electronics+Radio. I like making things. I still live with my parents, so I don't have to pay rent/utilities, or buy food, or any of the tons of other things that are required to live on my own. I get along well with them, and they get along well with me. Yay !!! (^_^)

Best Regards,
SC

25793. Re: [regenrx] Re: A Simple Regen Receiver For Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-06 23:55:58 UTC
From: Michael
Topic: 25673 Message: 25793

Suzie, you are doing it all right - keep experimenting with the same design until
you are sure it's working as well as it should - or until you feel you have learnt enough
to move on :-) I remain curious to know whether R3 worked better as 1k or 100k. I only tried it with 100k, but felt uneasy with the open "floating diode".

Discarded electronic equipment can yield lots of components, which are usually
of good quality. It is fiddly, but cheap. If you can liaise with local hams, they will
doubtless be willing to help.

Solderless breadboards have their quirks, as you have discovered. They are more difficult to use for radio-frequency designs because of unwanted capacitance effects. In a regen, the regenerative detector's components often need to be grounded at the same point, or close together. The Manhatten pads you have been using are better suited. You can cut your own out of old bits of circuit board.

The MFJ-8100K you refer to is a good design, with various mods and clones. You could build it with components you already have to hand and a few extras
much cheaper than buying the kit. Search online for MFJ-8100, Clone MFJ, Ten Tec 1253, Veronics VEC-102K and similar.

Michael

25794. Re: [regenrx] Re: A Simple Regen Receiver For Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-07 00:59:58 UTC
From: Suzie Creamcheeze
Topic: 25673 Message: 25794

On Sat, Feb 6, 2016 at 6:55 PM, Michael
michael.setaazul@... [regenrx] <regenrx@yahoogroups.com>
wrote:
>
> Suzie, you are doing it all right - keep experimenting with the same
> design until
> you are sure it's working as well as it should - or until you feel you
> have learnt enough
> to move on :-)
>

Dear Michael,

Thank you for your words of encouragement. (^_^) As you know, I used my oscilloscope to troubleshoot the Simple Regen Radio For Beginners after I first built it, and it didn't work. I am continuing to try and find some information about that. I am trying to learn how to use my new oscilloscope, and I think that this radio might be a good subject for testing.

>
> I remain curious to know whether R3 worked better as 1k
> or 100k. I only tried it with 100k, but felt uneasy with the open
> "floating diode".
>

I will try to get my soldering iron out, hooked-up, and melting solder in the next few days. I will certainly trade out R3 from 1K to 100K and see what happens. . It seems like a huge difference between them, like two orders of magnitude? Is that right? It won't blow up the circuit, will it?

>
> Discarded electronic equipment can yield lots of components, which are
> usually
> of good quality. It is fiddly, but cheap. If you can liaise with local
> hams, they will
> doubtless be willing to help.
>

There is a Goodwill Outlet several miles away from where I live. This is a place where they take stuff that doesn't sell at the regular Goodwill Retail Stores, at regular Goodwill prices. At the Outlet, they sell stuff by weight. For electronics, they have a list with basic prices on it. I recently found a SoundDesign AM/FM/8-track deck for $2.00+tax, that yielded an air-variable capacitor, a ferrite rod,

and all sorts of other big radio components. I don't think I have ever seen an 8-track whatever (tape/disk/cartridge/?). It is from the 1980s. They also sell small computer printers for $2 each, and the larger computer printers for $5 each. I think that might be worth it for the stepper motors alone? I havfe to be very careful about how much stuff I bring home because I don't have much space, and I am not allowed to fill up the trash bin so that my Dad doesn't have enough room to put the trash.

I found an old TV by the curb the other day, and my Dad helped me get it home. Sadly, it did not yield too much. I was looking for an HC-33 crystal of some kind, and maybe some toroids, but this set just didn't have any "goodies" as far as I can tell. But, then again, what do I know? I put all the circuit boards in a box, so I can salvage components from them in the future.

I have picked up a couple of tiny (5-inch diagonal) B&W TVs at the Goodwill for $3.00 each. I don't know why I bought them? Well, they are cute for one thing. One of them actually picks up some stray radio signals, here and there. Also, I remember one synth artist who used an old B&W TV to make an oscilloscope for one of his synths. The waveform moved to the synth output. Maybe one day I'll know enough to try something like that? I justified the purchases because I don't know how much longer these old TVs will be available? For the most part, the Goodwill no longer accepts old tube TVs for donations. So I guess most of them are going to the landfill?

I don't think I'm going to waste my time with any more old TVs. I'm glad I was able to get the curb TV taken apart without getting shocked by an old capacitor, or whatever. I am still disappointed by that "find."

>
> Solderless breadboards have their quirks, as you have discovered. They are
> more difficult to use for radio-frequency designs because of unwanted
> capacitance effects. In a regen, the regenerative detector's components
> often need to be grounded at the same point, or close together. The
> Manhatten pads you have been using are better suited. You can cut your own
> out of old bits of circuit board.
>

I cut the pads out of copper-clad board with a jewelers saw frame and a 2/0 saw blade. First, I layout the lines on the board with a fine-tip Sharpie, then I cut along the lines.

>
> The MFJ-8100K you refer to is a good design, with various mods and clones.
> You could build it with components you already have to hand and a few
> extras
> much cheaper than buying the kit. Search online for MFJ-8100, Clone MFJ,
> Ten Tec 1253, Veronics VEC-102K and similar.
>

> Michael
>

I actually found out how to access the files section of regenrx and regenrx2 the other day. I had to get a Yahoo account to do it. I am subscribed to this list with a non-Yahoo account, so I didn't have access to the files section. But now I do. I do remember seeing a file for the MFJ-8100 Clone. I will look for it again. It would be really nice to be able to build it myself, for less than the cost of a kit. I would rather do it like that anyway. (^_^)

Good to hear from you again, Michael. I appreciate your help.

Sincerely,
SC

25795. Re: A Simple Regen Receiver For Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-07 10:38:48 UTC
From: dawmast@...
Topic: 25673 Message: 25795

The Desert Rat receiver doesn't seem to receive SSB stations very well. The tank circuit is at the collector of the Q-Multiplier BJT. Shifting internal capacitanes with the modulation of the SSB signal detunes the tank circuit, causing a warbled sound of the detected SSB signal. To cure this problem, substitute the general purpose BJT of the Q-Multiplier with an RF transistor which has much less internal capacitances.

25796. Re: [regenrx] Re: A Simple Regen Receiver For Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-07 12:55:52 UTC
From: Daniel Yoder
Topic: 25673 Message: 25796

Thanks for the great insight. How can you tell with a regen when you are picking up an AM vs SSB signal? Can you monitor with an ammeter when you are getting closer to oscillation meaning the CW detection mode vs the AM or SSB area of regeneration.
Thanks Dan W3DKY

On Sun, Feb 7, 2016 at 5:38 AM, dawmast@... [regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> The Desert Rat receiver doesn't seem to receive SSB stations very well.
> The tank circuit is at the collector of the Q-Multiplier BJT. Shifting
> internal capacitanes with the modulation of the SSB signal detunes the tank
> circuit, causing a warbled sound of the detected SSB signal. To cure this
> problem, substitute the general purpose BJT of the Q-Multiplier with an RF
> transistor which has much less internal capacitances.
>
>

25797. Building the Desert Ratt 2 Regen Receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-07 12:59:10 UTC
From: Suzie Creamcheeze
Topic: 25797 Message: 25797
Attachments: 3 described; binary payloads are missing from this source WARC

On Sun, Feb 7, 2016 at 5:38 AM, dawmast@... [regenrx] <
regenrx@yahoogroups.com> wrote:
>
> The Desert Rat receiver doesn't seem to receive SSB stations very well.
The
> tank circuit is at the collector of the Q-Multiplier BJT. Shifting
internal
> capacitanes with the modulation of the SSB signal detunes the tank
circuit,
> causing a warbled sound of the detected SSB signal. To cure this problem,
> substitute the general purpose BJT of the Q-Multiplier with an RF
transistor
> which has much less internal capacitances.
>

Dear dawmast,

Thank you very much for this information.

I am currently working on the Manhattan Style Construction layout for the
DR2 circuit, based on the work done by Dave Richards (AA7EE) at:
https://aa7ee.wordpress.com/2013/05/11/the-na5n-desert-ratt-2-regen/

So far, I have redrawn his schematic (posted on the above web page) to
become more familiar with the circuit, and to try and see what
modifications he made to it, from the original schematic by Paul Harden (
NA5N), seen at: http://www.aoc.nrao.edu/~pharden/hobby/DR2.pdf. There is
also a description of how the circuit works, located at:
http://www.aoc.nrao.edu/~pharden/hobby/DR2descr.pdf

This is what I am working from:

As far as I know, that is an accurate reproduction of Dave Richards
schematic of his version of the Desert Ratt 2.

My next step was to trade actual component outlines for the schematic
symbols, thus:

I have missed a few schematic symbols in the above drawing, but all of them
will eventually be reworked.

The next thing I do is to start making the Manhattan Style Construction
layout by adding pads to the drawing.

This is a work-in-progress, and is far from being finished. I do all the drawing using a graphics program called Kolourpaint, which is VERY easy to use, and has all the tools I need.

As I work on the layout, from time to time I will check my work against the schematic, to make sure that I have not strayed too far from the actual circuit. However, I will be pushing and pulling pads and components to make things fit together better, and to get various knobs up to the front panel, and so forth. I used this technique successfully with my very first regen radio, "A Simple Regen Receiver For Beginners" by Charles Kitchin, (N1TEV).

It takes a long time to do all this drawing, and this technique is probably NOT for everyone, but *I* enjoy drawing, and as I work on the drawings, I slowly become familiar with the circuit. At first it seems very complex to me. But as I draw, it becomes less complex.

Greetings,
SC

25798. Re: [regenrx] Re: A Simple Regen Receiver For Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-07 13:17:12 UTC
From: Bill Cromwell
Topic: 25673 Message: 25798

Hi Dan,

When you tune through an AM signal with the detector oscillating you will hear the AM carrier as a tone that decreases in pitch as you tune through from one side to the other. The tone will decrease in pitch until it disappears - zero beat. Continue tuning in the same direction and the pitch becomes audible again but increases in pitch as you tune farther from the carrier. It is exactly the same as having the BFO on in your superhet while tuning through an AM station.

An SSB signal does not radiate a carrier. If you turn your superhet BFO off or your regen detector not oscillating then SSB will *never* be intelligilble but will always sound like Donald Duck mumbling and grumbling. To recover SSB (or CW) you must have the BFO on in your superhet on or the regen detector must be oscillating.

With no incoming signal but only "noise" in your receiver you will hear the noise "change" when the the regen detector goes in and out of oscillation as you increase and decrease the feedback. Increase the feedback to get into oscillation

73,

Bill KU8H

On 02/07/2016 07:55 AM, Daniel Yoder danyoder.cs@... [regenrx] wrote:
> Thanks for the great insight. How can you tell with a regen when you
> are picking up an AM vs SSB signal? Can you monitor with an ammeter
> when you are getting closer to oscillation meaning the CW detection
> mode vs the AM or SSB area of regeneration.
> Thanks Dan W3DKY
>

25799. Re: [regenrx] Re: A Simple Regen Receiver For Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-07 14:06:51 UTC
From: Daniel Yoder
Topic: 25673 Message: 25799

Thanks Bill,

I never understood most of what you just told me, especially zero beat.
Are you saying that if I want to pickup AM the detector has to be just on
the verge of oscillation to hear the audio, and if it is oscillating that I
will here a tone only which is the carrier. Which means that the crystal
diode did not demodulate the signal yet. I assume that what you told me is
true for crystal sets as well as a 6sn7 regen. Can one monitor the actual
moment when the tube or diode goes into oscillation and when you are
creeping up on it. Can a micro ammeter measure the grid or plate activity
on the 6sn7 or a dip in resonance or feedback on the tanks circuit?
Thanks so much I think I see the light or at least the dawn.
Dan W3DKY

On Sun, Feb 7, 2016 at 8:17 AM, Bill Cromwell wrcromwell@...
[regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> Hi Dan,
>
> When you tune through an AM signal with the detector oscillating you
> will hear the AM carrier as a tone that decreases in pitch as you tune
> through from one side to the other. The tone will decrease in pitch
> until it disappears - zero beat. Continue tuning in the same direction
> and the pitch becomes audible again but increases in pitch as you tune
> farther from the carrier. It is exactly the same as having the BFO on in
> your superhet while tuning through an AM station.
>
> An SSB signal does not radiate a carrier. If you turn your superhet BFO
> off or your regen detector not oscillating then SSB will *never* be
> intelligilble but will always sound like Donald Duck mumbling and
> grumbling. To recover SSB (or CW) you must have the BFO on in your
> superhet on or the regen detector must be oscillating.
>
> With no incoming signal but only "noise" in your receiver you will hear
> the noise "change" when the the regen detector goes in and out of
> oscillation as you increase and decrease the feedback. Increase the
> feedback to get into oscillation
>
> 73,
>
> Bill KU8H
>
> On 02/07/2016 07:55 AM, Daniel Yoder danyoder.cs@gmail.com [regenrx]
> wrote:

> > Thanks for the great insight. How can you tell with a regen when you
> > are picking up an AM vs SSB signal? Can you monitor with an ammeter
> > when you are getting closer to oscillation meaning the CW detection
> > mode vs the AM or SSB area of regeneration.
> > Thanks Dan W3DKY
> >
>
>
>

25800. From Arnie CO2KK about amigo Cris Greggio radios and a question to everyone on the list

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-07 16:04:58 UTC
From: Prof. Arnaldo Coro Antich
Topic: 25800 Message: 25800

Hola amigo Cris:

Nice to see the schematic of the ECH81 front end...
It may be improved a little bit by using a dual tuned bandpass
input RF filter.... How do you regulate the operating point
of the triode to move it into oscillation as required for CW and
Single Side Band modes. By the way, it will also pick up the
digital modes like PSK31....!!!
The ex Soviet Union vacuum tube equivalent of the ECH81
I think that is the 6I??? P... I like in India... and it was used
in the famous R250 series of professional communications
receivers...
Have you seen the information about the ZL2JJ Regenerative
Receiver ?....
I have the complete files...although it uses very old vacuum tubes
the design can be adapted to more modern types, and the
mechanical layout is something to be studied for best shielding
and ruggedness ....
Congratulations for helping all of us regenerative radios enthusiasts
to build better radios with whatever parts we have available...
Finally a question not only for you but also to everyone
on our glowbugs and regennx internet lists:
QUESTION :
Have you compared side by side your best
vacuum tubes regenerative receiver with your best solid state
(junction transistors or FET or MOSFET) regenerative receiver?

I have yet to do that test in a ¨scientific¨ and properly instrumented
test condition... but from my more than 50 years of experience
on this subject of regenerative radios, so far not one solid state
design has matched even by second or third choices of vacuum tube
sets, and never matched the top best design !!!
Keep up to good work
73 and DX
Arnie Coro
CO2KK
Host of Dxers Unlimited radio hobby program
Radio Havana Cuba

25801. Re: [regenrx] From Arnie CO2KK about amigo Cris Greggio radios and a question to everyone on the list

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-07 17:27:14 UTC
From: Leonard Meek
Topic: 25800 Message: 25801

Hi, Prof. I'm always interested in other peoples regens, and I would like to see the ZL2JJ design you mentioned. I have plenty of old tubes, including a couple of WD-11's, but I would probably use 864's, since I have several of them. It would be great if you could post the schematic, now that we can include graphics with our email.

Leonard

----- Original Message -----
From: "'Prof. Arnaldo Coro Antich' coro@... [regenrx]"
<regenrx@yahoogroups.com>
To: "Cris Greggio" <gregcris@...>; <tetrode@...>;
<regenrx@yahoogroups.com>
Sent: Sunday, February 07, 2016 6:04 AM
Subject: [regenrx] From Arnie CO2KK about amigo Cris Greggio radios and a question to everyone on the list

> Hola amigo Cris:
>
> Nice to see the schematic of the ECH81 front end...
> It may be improved a little bit by using a dual tuned bandpass
> input RF filter.... How do you regulate the operating point
> of the triode to move it into oscillation as required for CW and
> Single Side Band modes. By the way, it will also pick up the
> digital modes like PSK31....!!!
> The ex Soviet Union vacuum tube equivalent of the ECH81
> I think that is the 6I??? P... I like in India... and it was used
> in the famous R250 series of professional communications
> receivers...
> Have you seen the information about the ZL2JJ Regenerative
> Receiver ?....
> I have the complete files...although it uses very old vacuum tubes
> the design can be adapted to more modern types, and the
> mechanical layout is something to be studied for best shielding
> and ruggedness ....
> Congratulations for helping all of us regenerative radios enthusiasts
> to build better radios with whatever parts we have available...
> Finally a question not only for you but also to everyone
> on our glowbugs and regennx internet lists:
> QUESTION :
> Have you compared side by side your best
> vacuum tubes regenerative receiver with your best solid state
> (junction transistors or FET or MOSFET) regenerative receiver?
>

> I have yet to do that test in a ¨scientific¨ and properly instrumented
> test condition... but from my more than 50 years of experience
> on this subject of regenerative radios, so far not one solid state
> design has matched even by second or third choices of vacuum tube
> sets, and never matched the top best design !!!
> Keep up to good work
> 73 and DX
> Arnie Coro
> CO2KK
> Host of Dxers Unlimited radio hobby program
> Radio Havana Cuba
>
>
>
>
> ------------------------------------
> Posted by: "Prof. Arnaldo Coro Antich" <coro@...>
> ------------------------------------
>
> "In the interest of Regenerating radio's lost art of Regeneration"
> ------------------------------------
>
> Yahoo Groups Links
>
>
>
>

25805. Audio amplifier ¨tail end¨ for vacuum tubes reg enerative receivers....

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-07 18:31:38 UTC
From: Prof. Arnaldo Coro Antich
Topic: 25805 Message: 25805
Attachments: 3 described; binary payloads are missing from this source WARC

[Body unavailable in the source archive]

25806. Simple power supply with 1N4007's that I recycle from the Compact Fluorescent Light Bulbs

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-07 18:37:11 UTC
From: Prof. Arnaldo Coro Antich
Topic: 25806 Message: 25806
Attachments: 1 described; binary payloads are missing from this source WARC

I also prefer a maximum B PLUS voltage of no more than 140 volts
The electrolytic filter capacitors are also recycled from the CFL
circuit boards.. they are 22 mfd at 250 volts... so just use two or three
in parallel for the PI capacitor-resistor-capacitor power supply
smoothing filter....

25807. RE: [regenrx] Audio amplifier ¨t ail end¨ for vacuum tubes regene rative receivers.... [3 Attachme nts]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-07 18:41:23 UTC
From: Larry
Topic: 25805 Message: 25807
Attachments: 3 described; binary payloads are missing from this source WARC

Generally you have a cap from input to the volume control.

Larry

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Sunday, February 07, 2016 1:32 PM
To: regenrx@yahoogroups.com
Subject: [regenrx] Audio amplifier ¨tail end¨ for vacuum tubes regenerative receivers....
[3 Attachments]

25808. RE: [regenrx] Simple power supply with 1N4007's that I recycle from the Compact Fluorescent Light Bulbs [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-07 18:43:10 UTC
From: Larry
Topic: 25806 Message: 25808
Attachments: 1 described; binary payloads are missing from this source WARC

ALSO! Generally you have some cap across the diodes to keep switching pops from coming thru radio receiver. I would use 0.01 uFd.

Larry

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Sunday, February 07, 2016 1:37 PM
To: regenrx@yahoogroups.com
Subject: [regenrx] Simple power supply with 1N4007's that I recycle from the Compact Fluorescent Light Bulbs [1 Attachment]

I also prefer a maximum B PLUS voltage of no more than 140 volts
The electrolytic filter capacitors are also recycled from the CFL circuit boards.. they are 22 mfd at 250 volts... so just use two or three
in parallel for the PI capacitor-resistor-capacitor power supply
smoothing filter....

25809. RE: Another useful better circuit for the tail end of any vacuum tubes radio... note use of audio feedback too...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-07 18:58:28 UTC
From: Prof. Arnaldo Coro Antich
Topic: 25809 Message: 25809
Attachments: 1 described; binary payloads are missing from this source WARC

> CIRCUIT DESCRIPTION
> The heart of the Amplifier is a single ECL82 tube. Enclosed in it's
> envelope is a triode alongside a penthode, the latter making up the
> output stage of this single-ended circuit. Input level control
> potentiometer at the input is optional and can be replaced with a 1
> Meg Ohm fixed resistor to ground. The final stage utilizes the
> penthode driving the output transformer. The ECL82 is operated purely
> in cathode bias mode. There is a Negative Feedback signal taken from
> the secondary transformer wiring. Feedback is taken to the cathode of
> the triode.
> Power Supply requirements are 250-280 VDC/45mA and 6.3V/800mA AC or DC
> filament voltage.
> Fig.1 Tiny Amp Schematic
>
> 3W SE Amp Schematic
> Fig.1
>
> *Specifications:*
> Frequency Response: 50Hz - 20kHz (-3dB)
> Input sensitivity: 0.3 V
> Input Impedance: 250k
> Supply Voltage: 250 - 280 VDC/35-45mA
> Power Output:3 Watt Max.
> Tube: ECL82/6BM8
>
> *MAIN PARTS*
> *REF. #* *DESCRIPTION* *QUANTITY* *PART No:* *SUPPLIER*
> NA Hammond Chassis 13.5" x 5" x 2" 1 P-H1441-18BK3
> www.tubesandmore.com
> P1 Potentiometer 250K audio w. switch 1 R-V250K-N2
> www.tubesandmore.com
> NA 9 pin tube socket, chassis mnt. 1 P-ST9-511 www.tubesandmore.com
> NA 1/4" input jack 1 W-SC11 www.tubesandmore.com
> NA terminal strip, 5 position 4 P-0501H www.tubesandmore.com
> NA binding post 2 S-H266B www.tubesandmore.com
> V1 6BM8/ECL82 vacuum tube 1 T-6BM8 www.tubesandmore.com
> TR2 Output Transformer SE 1 P-T31 www.tubesandmore.com
> C6 capacitor 4.7uF/350V 1 C-ET4D7-350 www.tubesandmore.com
>
> *_OTHER PARTS:_*
> Resistors (0.25W 5% unless noted otherwise):
> R1 = 2.2K
> R2 = 220K

> R3 = 820K
> R4 = 560R/1W
> R5 = 33K
> R6 = 33K/0.5W
> R7 = 1K
> Rs = series resistor 470 Ohms 2 Watts (see note* below)
>
> Capacitors:
> C1 = 0.22uF/100-250V film cap
> C2 = 0.033uF/400V film cap
> C3 = 100pF/100-1000V film or ceramic
> C4 = 220uF/25-50V electrolytic
> C5 = 0.01uF/400-630V film
>
> Semiconductors:
> BR1 = rectifier bridge 400V/1A (Fig.3)
> D1, D2 = 1N4007 (Fig.4)
>
> Misc.: fuse holder, Fu1 0.2A MDL, Fu2 0.1A AGC, rubber feet.
>

25811. Re: [regenrx] Re: [Glowbugs] R: From Arnie CO2KK about amigo Cris Greggio radios and a question to everyone on the list

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-07 21:32:14 UTC
From: Michael
Topic: 25802 Message: 25811

> Please be advised the schematics embedded in text, or attached to
> text, are difficult to extract and those in the regenrx files are only
> a little less difficult to work with. However, schematics that are
> sent as attachments to an email, as was Chris' initial regenerodyne
> drawing, can be immediately copied into graphics programs and worked
> on. You know you have it right when you see a little paper clip in the
> upper right corner of the email.
> Mike, W6MAB

Using Thunderbird (as a struggling new convert...) I find that
schematics are easily extracted and saved : right-click, then save-image-as.

Michael

25812. Re: [regenrx] Re: A Simple Regen Receiver For Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-07 21:50:03 UTC
From: Suzie Creamcheeze
Topic: 25673 Message: 25812

On Sun, Feb 7, 2016 at 1:26 PM, Phil ko6bb1@... [regenrx]
<regenrx@yahoogroups.com> wrote:
>
> G'mornin' Suzie,
>

Dear Phil KO6BB,

Thank you very much for all of the information about parts.

When I was hanging around the fringes of the DIY Synth communities I ran across a list of components that were most often used by syth builders, and that they usually included in an order to a parts distributor. Here is a *small* part of that list:

Electrolytic Capacitor 25v 100uF 20%
Electrolytic Capacitor 35v 47uF 20%
Electrolytic Capacitor 25v 4.7uF 20%
Electrolytic Capacitor 35v 1uF 20%
Ceramic Capacitor 470pF 50V 10%
Ceramic Capacitor 1000pF 50v 10%
Ceramic Capacitor 4700pF 50v 10%
Ceramic Capacitor 0.01uF 50V 10%
Ceramic Capacitor 0.047uF 50V 10%
Ceramic Capacitor 0.1uF 50v 10%
Ceramic Capacitor 0.47uF 50v 10%

You can see that there is a pattern of values in that list. Do you have a similar list of components that you always keep on hand for building solid state radios? When I order parts from a distributor, I try to order at least 10 of each part, and I get a price break. However, I can't always do that. It depends on how much each part costs.

How about tolerances? I think that Mr. Kitchin's Simple Regen Radio For Beginners did not have any requirements for tolerances? If you were starting to buy parts to build "archive quality" solid state radios, would you stick to 1% tolerances? Although I am almost certain that there are other tolerances for components, I am familiar with 1%, 5%, 10%, and 20%.

I have read that the wire-wound resistors are not good for building radios because they have a certain amount of inductance, due to the coil made by the wire. So non-inductive resistors are probably a good idea, overall?

I am slowly learning about ordering parts. I still make mistakes, mainly due to not reading the specifications closely enough. Things that I get wrong, more often than not, are the lengths of the leads. I like to get leads that are long and not too thin (thicker leads go into a breadboard better than really thin leads). It is a good thing that it takes me so long to draw a circuit and a layout because it usually takes me weeks to find parts for a project.

I remain leery of Amazon.Com because lately, they have gotten much worse at packing stuff. I found my SDS1052DL Siglent oscilloscope at Amazon.Com, and ordered it alone. The scope arrived okay, but they threw a fragile item from a separate order in the box with the scope, and it arrived broken. I had to return it for a refund. The thing is, I ordered the fragile item with two other light-weight items in a completely separate order from the scope, and all of those items should have been shipped together, but Amazon.Com mixed and matched shipments, and just threw the fragile item loosely in the box with a heavy oscilloscope box. <sigh> That is just one of many returns I have had to make recently. If it only happened every once in a while, fine, I could probably deal with it, but when I have to return something from almost every order, it gets old really quickly. I am going to boycott Amazon.Com electronics parts for awhile. I am only going to use them for books from now on. Even so, the last thing I ordered from Amazon.Com was a book and an electronics gadget. They arrived on-time, and the box was in good shape, and the book inside the box was okay, and the electronic gadget was undamaged, but the electronic gadget did NOT work. It was Dead-On-Arrival. So I had to return it for refund. So I'm just not going to order any more electronics parts, or gadgets, or equipment from Amazon.Com. I am glad to hear that you have had good experiences with that company. I sure wish I could say the same thing. Sorry for going on like that.

I will comment more on your post.

>
> OK, it looks like you're off to a good start. Sorry those breadboards
> didn't work out for you (the ones I received are very good, but reviews
> showed that the quality seems to vary from one to the next. And the
> other person was correct that breadboards aren't suitable for a lot of
> RF stuff. Over the years I made most of my living doing RF work from a
> couple MHz to several GHz, a lot of government stuff.
>

I can highly recommend the solderless breadboards from the BusBoard Prototype Systems company. http://www.busboard.com/
In this case, I have had experience with cheap breadboards from other vendors, and quality breadboards from a reputable vendor, and I will NEVER go back to the cheap breadboards, ever again. It is worth the few extra dollars to get quality solderless breadboards. Likewise, I have purchased some of their stripboards and prototyping boards (perfboard), and the quality of those is also head and shoulders above the cheap varieties. I am really starting to appreciate quality

materials and parts. Even if I have to wait an extra month or so to earn the money for quality, I will do it because to me, it is worth it. I really didn't understand it when I first started out (and I still consider myself a beginner), but I am quickly becoming an evangelist for using quality parts, and eschewing cheap, poor-quality parts. I am sure that more experienced radio builders can probably make anything work.

>
> Anyway, this reply has more to do with parts and availability. Over the
> years I've bought a lot of stuff from Mouser, Jameco, Digikey etc.
> Mouser with their no minimum purchase is one of the best, but there are
> some other outfits more oriented towards the hobbyist that are great for
> specialty items. The problem is, when buying parts for a specific
> project and just ordering those parts raises the price dramatically
> (price per part). I've done that before.
>

I go to Jameco and look at their parts when I am shopping for components, but what they don't seem to understand is that while I have their catalog open in a browser Tab, I also have Tabs open at Newark/element14, DigiKey, and Mouser. Usually, Jameco loses my order because their prices aren't low enough, or I they want to ship a generic part (Manufacturer? Major Brands? Jameco ValuePro? what are those?). I have ordered from Newark/element14 before, and gotten good parts, but my Dad didn't like the way they billed his credit card, so I stay away from them, for the most part, unless they have the parts at the best price, which is not always the case. Likewise, DigiKey has not been able to beat Mouser at lowest prices. Often, Mouser offers a price-break at ordering 10 parts, and DigiKey's price-break starts at 25 parts. How about that? So I have mainly been using Mouser when I order parts. I still do comparison shopping, with Tabs open for each distributor. I have also looked at sites like OctoPart. There are other Parts Search Engines as well. I just like my browser Tabs approach. It is always an education to search for electronics components and parts.

>
> My last 'real' job was working for a local TV shop where I did all their
[snipped]
> service shops in the area. That's when I officially 'retired'.
>

It sounds like you have some really good experience. There are no longer any TV shops around here that I know of.

>
> So I sort of 'need' a stock of basic parts
> like resistors, capacitors, common transistors etc.
>

That is what I am trying to figure out. I think that once I have built a few solid state Regen Radios, that I will ahve a better idea of which "common" parts to have on hand.

>
> Used to be I could get 'some' things from the local RS store, but all of
> them in Central Calif have closed up shop. When our local store closed
> I bought ALL their mini-toggle switches, many Connectors, small project
> boxes etc for pennies on the dollar. I didn't buy their resistor and
> capacitor stock as they still wanted too much for it.
>

My first CK-1000 Parts Kit had all sorts of components that I have never used. Other parts ran out quickly, but believe it or not, Radio Shack did not carry the same parts as was in their CK-1000 kit. So they lost my business when I had to re-order the parts used most often from other distributors. I don't know, but I think I got into the Electronics hobby too late. I think Radio Shack closed about a year or so after I got into electronics. The RS at The Mall was really just a cell-phone store. None of the sales associates knew anything about what I was looking for when I went in to buy a component or two for a project. I did buy about $30 worth of stuff when the store closed, and it was about $300 worth of stuff if I had paid full price for it. I could have done better if I had known what to look for. I did get several spools of wire, which is something that I use a lot of. $9 spools of hook-up wire were going for $1. Solid core copper hook-up wire and copper stranded wire as well. I also got several spools of 24 AWG stranded copper speaker wire.

>
> Instead I ordered some various parts assortments from Amazon. The first
> one I bought was a 1/2W resistor assortment from somebody called
> "JoeKnowsElectronics". I ALMOST passed it by as the name was sort of a
> turn-off for me. But I gambled and it paid off. The parts were high
> quality and the price decent, and everything sorted in a box. Later I
> ordered his 1W resistor assortment, capacitor assortment and
> Semiconductor assortment. When they arrived I spot checked everything,
> quality is good, and the sorting in individual bags per P/N is
> convenient.I can wholeheartedly endorse the JoeKnowsElectronics"
> assortments (and I have no connection other than as a happy camper).
>

I have seen the JoeKnowsElectronics kits and I have passed them over. Thank you for your review, but I am currently boycotting Amazon.Com for all electronics components and gadgets. If I can find the brand from another source, I may consider trying it?

>
> I also ordered a 1/4W resistor assortment (25 each of 133 values, 3325
> resistors, all 1%) from somebody called "CuteQueen" (another turn-off
> name for me). Parts were all good quality, sorted in individual bags.
[snipped]

>

Once again, thank you very much for the recommendation.

> All this 'stuff' wasn't bought at once, but over time. Often when I
> need to order something from Amazon I'll also put a few what they call
> "Add-On" items.
[snipped]
>

I think that if I continue with the electronics hobby for awhile longer, then I will eventually build up a pretty good "junk box." It took me over three months to save up for the oscilloscope I bought, so I am already vested in this hobby for the time being. I got the oscilloscope for building synths, then got sidetracked by radios. I can use the scope for both.

>
> Now to be perfectly honest, there were a couple things from Amazon that
> I was less than happy with (but not enough to keep me from using Amazon
> again, I've just gotten more careful in what I order after reviews etc).
>

I must admit that I still use Amazon.Com for the "reviews" especially for books. But I am using my local Public Library more these days. Many books in a subject area repeat much of the same information, over and over, especially Beginner books.

>
> What comes to mind is. . .
> 1. When I designed/built my 7 tube + rect regen (actually 5 tubes
[snipped]
> worked out well.
>

You are lucky to have found some replacements so quickly and easily.

>
> 2. When we needed new batteries for our Cell phones (Motorola flip
> ordered a battery for her phone from "BatteriesAmerica", it was good.
>

I bought rechargeable 9V batteries and a charger from Amazon.Com, and they were okay. Tenergy was the brand name. Low Self Discharge batteries. They power my DMM, robots, synths, radio, and so forth.

>
> 3. I ordered a package of 80 colored LEDs for $2.80 from an Amazon
[snipped]
> it", she didn't want her accounting to get messed up (I let her do the
> checkbook).
>

The one thing I got from China, ordered through Amazon.Com, arrived in about 10 days from the order date, but it didn't work as advertised. The company refunded my money, and told me to toss the item in the trash bin, which I did. Trash is trash. Here again, I was going for "cheap" instead of "quality". I order the quality part next, an was not disappointed. Yeah, it cost a few dollars more, but it worked, and it is still working.

>
> But outside of those three things, I can't really think of any thing
> I've received from Amazon that wasn't as promised, or had problems..
> **********
>

Well, you've gotten an eyeful of my bad experiences with Amazon.Com in this post. Except for books, they have lost me as a customer. BTW, I am really enjoying the book that I got from them: "Experimental Methods in RF Design" by Wes Hayward, et al.

>
> To answer your question on the jumper wires. I like them very much, the
> little pins on them are stiffer than hookup wire, and it looks like
> they'll last a long time.
>

Thank you very much for that review. I have seen various packages for jumper wires for breadboards, but I have not bought any, yet.

>
> One of the bigger things I DID buy when the local RS store was closing
> was a nice 20Amp PS for my work bench (I have a 20A Astron on the bench
> that runs all the radio gear). Being a switching supply the RS one is a
> bit noisy RF wise for every day use, but more than good enough for the
> test bench. At under $25 (I think it was listed at about $70 retail)
> it was a jumpers good buy!
>

I have an old power supply from a computer that I am considering turning into a bench power supply. The more I make stuff, the more I am finding out just how handy it would be to have such a piece of equipment. I have looked at several tutorials on how to make a DIY PS from a computer PS. I think I can do it, if I keep it simple.

>
> But yes, I think the jumpers are good quality, and I don't have to worry
> about a nicked wire (from wire strippers) breaking. They're flexible
> (stranded) and each one has a small heat shrink over where the wire
> connects to the pin. Yeah, you can probably make them cheaper yourself,
> (and I understand how a budget is, I'm on one too).
>

So far, I have had some wire ends break off in the breadboard holes, but I have been able to get them out using the edge of an X-Acto knife

blade. There may come a day when one breaks off too far inside for me
to get it? It hasn't happened yet, knock-on-wood.

>
> When I was a teen
> back in the 1950's there was very little money for my radio hobby, but
> all the local TV shops knew me and loaded me down with old radios and so
> forth. A great plethora of parts for an aspiring radio man. They also
> taught me a lot, and sometimes I watched their shop if they had to go on
> a service call.
>

Those days are long gone, as far as I know. There aren't even any more
computer shops around here. If a computer breaks around here, people
just throw them away and buy a new one. I have several old computers
that I have pulled out of the trash bins in my neighborhood (picture
me in a do-rag, jeans, sneakers, and a sweatshirt, dumpster diving -
LOL). One day I will take them apart and scavenge components from
them. That day may come sooner than I expect because my Dad said the
basement was getting to cluttered with junk, and I'd better start
thinking of what to do with some of it. I was surprised when he helped
me pick-up an old TV that was on the curb in the neighborhood. But I
took that apart as soon as we got it home, boxed the circuit boards,
and threw away the rest of it. Actually, it IS getting cluttered down
here. I really DO need to clean it up. (^_^)

>
> It's good that you're still living with your parents and have a good
> relationship. That's what life is all about anyway.
>

I agree. I have no complaints at all. To live on my own, I would need
to have three or four part-time jobs, so that is totally
out-of-the-question. Then I really wouldn't have time for any
electronics+radio hobbies, and I would just barely be able to make
ends meet. I don't even have my own car. I have done the arithmetic.

>
> I've NEVER bought anything from eBay as I remember the early days when
> some of my Ham friends got stung on stuff people were selling and it
> wasn't as advertised. I understand they've changed some things but just
> never done it.
>

What is the saying? Once bit, twice shy. That is my Dad. Nothing from
eBay at all, no matter what. For me, eBay does not exist. I don't even
look at stuff there, no matter what. What good would that do me?

>
> Have a GREAT day and keep enjoying electronics. I can't tell you how
> much I've seen things change in the past 60+ years. I grew up on tube
> stuff (transistors were just getting to be fairly common in the '60s and

> very rare and expensive in the late '50s).
>

Yeah, well, I hope I can live to be 60 years old. It seems like such a long time from now. I have no idea what the future is going to be like? I will enjoy my hobbies as long as I can. It is fun to learn new things.

>
> 73 From "The Beaconeer's Lair"
> Phil, KO6BB
>

Thank you very much for taking the time to answer my post, and to put up with my chatter. I am always learning new things from people.

Best Regards,
SC

25813. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-09 09:59:47 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 25813

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Ceramic Resonator Regen Trcvr.pdf
Uploaded by : qrper723 <qrper723@...>
Description : MY Ceramic Resonator Regen Trcvr Circuit

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Ceramic%20Resonator%20Regen%20Trcvr.pdf

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

qrper723 <qrper723@...>

25814. Re: [regenrx] New file uploaded to regenrx can not find it

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-09 16:16:51 UTC
From: Rob
Topic: 89 Message: 25814

can anyone see this pdf?
I do not.

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Ceramic%20Resonator%20Regen%20Trcvr.pdf

On 02/09/2016 04:59 AM, regenrx@yahoogroups.com wrote:
>
>
> Hello,
>
> This email message is a notification to let you know that
> a file has been uploaded to the Files area of the regenrx
> group.
>
> File : /Ceramic Resonator Regen Trcvr.pdf
> Uploaded by : qrper723 <qrper723@yahoo.com>
> Description : MY Ceramic Resonator Regen Trcvr Circuit
>
> You can access this file at the URL:
>
https://groups.yahoo.com/neo/groups/regenrx/files/Ceramic%20Resonator%20Regen%20Trcvr.pdf
>
> To learn more about file sharing for your group, please visit:
> https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398
>
> Regards,
>
> qrper723 <qrper723@...>
>
>

25815. Re: [regenrx] New file uploaded to regenrx can not find it

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-09 16:37:14 UTC
From: les.au49@...
Topic: 89 Message: 25815

Hello Rob! My computer displays a message: "Oops! Invalid path" - so I don't see it. - Les

25816. I can not see that file here !!!

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-09 18:19:16 UTC
From: Prof. Arnaldo Coro Antich
Topic: 25816 Message: 25816

> You can access this file at the URL:
>
https://groups.yahoo.com/neo/groups/regenrx/files/Ceramic%20Resonator%20Regen%20Trcvr.pdf

The above does not open !!!
73 y DX
Arnie Coro
CO2KK

25817. Re: I can not see that file here !!!

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-10 02:49:01 UTC
From: les.au49@...
Topic: 25816 Message: 25817

Hello Prof Coro! Can you send an e-mail to my address, here, on Yahoo, please?
Thank you - Les Smith

25818. Joe's Reflex Regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-10 14:12:10 UTC
From: wa4chq@...
Topic: 25818 Message: 25818

Hi all... I tried building the WBR last year and had partial success with it. After 3 rebuilds and no luck I decided to but the project on the back burner. My space is limited these days for 'brewing so I may go for long periods without lighting up the soldering iron. Lately I've been hit with the regen bug again. I've looked at some of the solid state projects here and on you tube. I kept going back to Joe's Reflex Regen. It sounded really nice and and it covers 80 and 40m with a flick of a switch. And Joe sounded like a really nice guy, he would be the Elmer I never had. Well I just learned that Joe, K8LKC is a SK...he passed away the 16th of January. I didn't know Joe. I only found him when looking at the regen rcvrs on Youtube. So, I think now more then ever, I will build "Joe's Reflex Regen".

25819. Re: Joe's Reflex Regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-10 17:15:51 UTC
From: wb8yyy@...
Topic: 25818 Message: 25819

Very interesting story. It does have me curious how Joe's regen compares with the recent Ozark Patrol (schematic at 4state qrp, I did mine homebrew). The OP is a very nice SWL style receiver that copies AM signals wonderfully (with much less fading than my first portable superhet) and can be adjusted to copy some CW and SSB (if you carefully look for it)

Also, I had good success somehow with the WBR. Its a wonderful 40m ham band receiver. I had all but the varactor diodes - these were sampled from someone like Skyworks - I put the tiny diodes onto a little test board that had appropriately spaced pads. if you have one started, I would not throw it away.

73 Curt

25820. Re: Joe's Reflex Regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-10 22:30:28 UTC
From: wa4chq@...
Topic: 25818 Message: 25820

Hi Curt...no, I'm not throwing it out....just giving it a break.
72 Neil wa4chq

25821. Re: [Glowbugs] BC-221 Homage and how to use the capacitor and dial for a first regenerative radio

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-11 15:09:07 UTC
From: Prof. Arnaldo Coro Antich
Topic: 25821 Message: 25821

Hola amigo !
Sure... great idea... and easy to put in practice...
My projects now are aiming at helping the young and not so young
newcomers to amateur radio here in Cuba be able to start listening
to 40 meters ...
Why 40 meters ? Because due to the daytime propagation characteristics
it covers our whole archipelago with very good
signals .... and at night you can pick up Dx stations too.
The radios must be ¨barebones¨ because electronic components
are not sold at any stores... so we must recycle parts from
equipment retired from service because of old age, breakdowns
and even struck by lightning !!! Yes, I have desoldered parts
that were part of a radio struck by a nearby lightning... not a direct
hit of course, but it left the radio dead for all practical purposes
because of the many IC's that were damaged !!!
A regenerodyne is the proper phase two of anyone wanting to
build her or his own receiver... I always start with a regenerative
that picks up signals on the AM broadcast band, so that the builder
will be attracted further by the fact that the radio built does
¨work¨ and audio comes out of a loudspeaker...
YES, a loudspeaker , better than headphones, because if makes
the project more attractive.
My vacuum tubes circuits designs are tried and tested, and I
include for every part a span of values that can be used and the
radio will still work...
For example the RC resistor capacitor circuit at the grid of the
regenerative detector will tolerate large deviations in values
from the optimum ones.... My preference for general reception
is to go for a small value capacitor , less than 100 picofarads
and a resistor at least 1 megaOhm... but the radio will work
with 50 pF and 2,2 megaOHm etc etc...
The favorite regenerative detector is the Hartley.... with a pentode
using screen grid control of the regeneration...
If you need any advice to start building your own regenerative
receiver, just send an email amigo...
No doubt that vacuum tubes regenerative are mucho , mucho more
better than solid state versions !!!!
Some of my regenerative detectors have started to receive
with less than 12 volts applied to the plate of the pentode...
but running around 24 to 50 volts or so is better...
I divide the project into several ¨modules¨ ... and build them
individually, then test them, and then do like at the aircraft
factories... integrate the modules into the receiver....
The typical regenerative with a Hartley detector uses

one 6AK5/5654 or Soviet 6ZHE1P pentode , and an audio
module built using a triode/pentode that comes in a single
glass envelope... The power supply module has three outputs
6.3 volts AC, 6.0 volts regulated DC for the regenerative
detector tube filaments, and the B plus that provides 140
volts DC for the audio tubes, and 36 volts regulated for the
detector plate and screen....
Winding the coils for the detector is a lot of fun... especially
because you must optimize the cathode tap on the coil...
in general to start testing , wind 20 turns of enamel wire
about no. 18 or no.20 on a 25 mm diameter plastic white
PVC tube... the antenna link is separated from the main coil
by about 5 millimeters (this is for the first test, because later
you will want to build a variocoupler to bring the signal from
the antenna into the grid tuned circuit...
The great attraction of this project is that it will practically
always ¨work¨ and there are very few chances of spoiling
parts (like what happens with solid state components
irreversibly damaged by just a little mistake)
Start by studying the circuit , then gather the parts, and
begin by assembling the power supply... testing it, and then
proceed with the audio amplifier module...
The RF module is the last to be built !!!
73 and DX
Arnie Coro
CO2KK

On 11/02/16 09:41, Ejparagi via Glowbugs wrote:
> Hello Arnie,
> While it will take up a little extra room and energy, you could
> build a buffer followed by a dual triode flip-flop to divide the 10
> MHz signal to 5 MHz for the purpose of avoiding the "reverse tuning."
> The circuit could be built on a small separate chassis (perhaps
> employing a salvaged food container) and wired into your ceramic wafer
> switch until you have the means to acquire a 5 MHz crystal. As a
> bonus, dividing the 10 MHz source by two also divides its drift.
> I have accumulated a few BC-221 tuning capacitors that have been put
> aside for regenerative receivers and HF VFOs as Cris has described. I
> have enjoyed reading your thoughts on high quality regenerative
> circuits over the years and will employ many of your ideas when I
> begin building again.
> 73,
> Ed
> WB9RMA
> In a message dated 2/10/2016 6:32:55 P.M. Eastern Standard Time,
> coro@... writes:
>
> Dear amigo Cris :
> You won ! I have only two CHA4/1 Russian (Soviet) clones
> of the BC221 !!!

> They are extremely well made too...
> Have a heavy workload at the two broadcast stations where
> I earn a great part of the $$$, so little time left to finish
> the new regenerodyne that will form part of a new ham
> radio station for the 40 meters band, that is the most popular
> one here in Cuba.
> By the way, 40 meters is going to be THE night time band for
> DX during the rest of the winter and also the spring season.
> Got ECH8's ¨ Soviet era version¨ for the new regenerodyne...
> And also some quartz crystals to test the ¨reverse tuning¨
> process... That is, with a 10.000 megaHertz quartz crystal
> and the regenerative detector operating from 2.0 to 3.0 or
> 2.0 to 4.0 megaHertz. if I add up the tuning range will be
> from 12.0 to 13.0 megaHertz... OK...
> But it I choose to subtract. then 10.000 minus 2.000 equals
> to tuning to 8.000 mHz and the minus 3.000 mHz will
> take me to 7.000 mHz but ¨reverse tuning ¨
> To achieve upward tuning foo 40 meters, the required crystal
> in case of the regenerative detector tuning from 2.0 to
> 3.0 mHz will be a 5.0 mHz quartz crystal that I do not have at
> hand...
> Actually the dial of the regenerative detector will keep the
> calibration very well too !!!
> Gary Johanson and I discussed many crystals plus detector tuning
> range combinations, and one of our first regenerodynes has
> the option to switch 5 quartz crystals by means of a ceramic
> wafer five positions selector switch...
> About the power supply, I still prefer to run the filaments of
> the regenerative detector using a well filtered and REGULATED
> 6.0 volts power supply... And for the detector, a very convenient
> trick is to series connect 3 or 4 12 volts Russian zener diodes
> to obtain 36 or 48 volts for the regenerative detector plate supply.
> I still think that the vacuum tubes regenerative detectors are much
> better than any solid state designs I have tested so far...
> 73 and DX and keep up the good work with your radios and
> passing along your valuable experiences.
> YOur friend in La Habana
> Arnie Coro
> radio amateur CO2KK
>
>
> On 10/02/16 17:31, Cris Greggio wrote:
> > Yes, the variable capacitor of the BC221 is the BEST i've ever
> seen. I store six BC221 for my future radios, and my current main
> vfo is made with one of those variables. The vfo is rock-stabele
> on 9mhz, from where, by triplication, I drive on cw my mopa on 28
> mhz. My regenerodyne is also based on one of those capacitors.
> >
> > The noisy operation when tunig depends on oxyde on the brushes.
> Only real remedy is to make an ultrasonic bath with a de-oxydizing

> additive: it will come back new mint.
> > Bearings are not the problem here.
> >
> > No back lash ... precise movement ... 100:1 redution ratio ...
> stable mechanically ... allows a really linear tuning in the 2-4
> mhz octave : what more do you need?
> >
> > I don't need a DDS or PLL for superb cw quality with a MOPA, up
> to 30mhz.
> >
> > 73 de Cris
> > IZ3CQI
> >
>
> --
> --
> ZCZC
> This is a transmission from the Glowbugs list
> To unsubscribe from this group, send email to
> tetrode+unsubscribe@...
> For more options, visit this group at
> http://groups.google.com/group/tetrode?hl=en
> NNNN
>
> ---
> You received this message because you are subscribed to the Google
> Groups "Glowbugs" group.
> To unsubscribe from this group and stop receiving emails from it,
> send an email to tetrode+unsubscribe@....
> For more options, visit https://groups.google.com/d/optout.
>
> --
> --
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> NNNN
>
> ---
> You received this message because you are subscribed to the Google
> Groups "Glowbugs" group.
> To unsubscribe from this group and stop receiving emails from it, send
> an email to tetrode+unsubscribe@...
> <mailto:tetrode+unsubscribe@...>.
> For more options, visit https://groups.google.com/d/optout.

25822. ECH83 Regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-11 17:23:07 UTC
From: rile_krt@...
Topic: 25822 Message: 25822

Hi 2 all, this is my first post in this group. :)
I found this regen receiver with ech83 tube. I'm interesting how much is good this regulation of feedback with voltage on grid(s)? What are the experiences?

Thanks!

Réaction avec une ECH83 - Forum Radio Doctsf
http://www.doctsf.com//forum/viewtopic.php?f=10&t=3701

Réaction avec une ECH83 - Forum Radio Doctsf
http://www.doctsf.com//forum/viewtopic.php?f=10&t=3701 Le forum des collectionneurs de radios anciennes

View on www.doctsf.com http://www.doctsf.com//forum/viewtopic.php?f=10&t=3701
Preview by Yahoo

25823. Re: 7 MHz ceramic resonator regenerative receiver with no coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-11 19:20:19 UTC
From: parkerp@...
Topic: 25655 Message: 25823

To prove the first one wasn't a fluke, here's a second. Much the same circuit but powers a speaker while drawing only about 10mA.

Another ceramic resonator regenerative receiver
https://www.youtube.com/watch?v=iYap-hCLD7Y

https://www.youtube.com/watch?v=iYap-hCLD7Y

Another ceramic resonator regenerative receiver
https://www.youtube.com/watch?v=iYap-hCLD7Y Another regenerative receiver using a ceramic resonator VXO. Pretty much the same as before except using an audio amplifier IC to drive a speaker.

View on www.youtube.com https://www.youtube.com/watch?v=iYap-hCLD7Y
Preview by Yahoo

25824. Re: [regenrx] Re: 7 MHz ceramic resonator regenerative receiver with no coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-11 23:54:53 UTC
From: Rob
Topic: 25655 Message: 25824

well done video... great clear schematic. Thank you

On 02/11/2016 02:20 PM, parkerp@... [regenrx] wrote:
>
> To prove the first one wasn't a fluke, here's a second. Much the same
> circuit but powers a speaker while drawing only about 10mA.
>
> Another ceramic resonator regenerative receiver
> <https://www.youtube.com/watch?v=iYap-hCLD7Y>
>
>
>
>
> image <https://www.youtube.com/watch?v=iYap-hCLD7Y>
>
>
> Another ceramic resonator regenerative receiver
> <https://www.youtube.com/watch?v=iYap-hCLD7Y>
> Another regenerative receiver using a ceramic resonator VXO. Pretty
> much the same as before except using an audio amplifier IC to drive a
> speaker.
>
> View on www.youtube.com <https://www.youtube.com/watch?v=iYap-hCLD7Y>
>
> Preview by Yahoo
>
>

25825. Re: ECH83 Regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-12 01:14:50 UTC
From: les.au49@...
Topic: 25822 Message: 25825

Hello Rile, Welcome to the regenerative receivers group! As I understand your question, you want to know how effectively the screen grid voltage controls the regeneration in your radio.

I built a detector somewhat like yours, but using the Hartley circuit (where the cathode is connected to a tap, part-way up the coil. I followed Prof. Coro's recommendation for this circuit, (using a 6AK5 detector and B+ supply of +36 volts). He wrote that this circuit worked very well indeed, and basing my answer on that AND my experience with the circuit I built I would say, "Very well indeed". Regeneration is very smooth. The receiver is very sensitive. In my set, the detector is most sensitive when the screen grid voltage is between 9 and 12 volts.

HOWEVER, David Newkirk wrote that the pentode + Hartley circuit is superior to the pentode + Armstrong (tickler) circuit, because the screen grid acts as a shield for the anode. His point is that the plate circuit (in a perfect circuit) would have NO RF signal present. There is a little, of course, or the regeneration in your circuit wouldn't work.

So - to answer your question a second time - controlling the regeneration by varying the screen grid voltage works very well. I suggest you go back thru the archives and search for postings by Arnie Coro, with keywords 6AK5 and pentode detector.

73 from Australia!
Les

25826. Re: [regenrx] Re: ECH83 Regen and try testing regenerative detectors with frame grid tubes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-12 01:54:07 UTC
From: Prof. Arnaldo Coro Antich
Topic: 25822 Message: 25826

Dear amigos Les, Rile and the other regenrx list members:
I want to test the same Hartley circuit using a frame grid
pentode... That is going to be a very interesting experiment
with the EF183, 6EH7, or EF184 and similar tube types....If any of you
cantry out this type of very high gain pentodes developed for
use by TV sets IF amplifiers... please go ahead and tell us
the results... My initial analysis is that the EF184 that is not
a variable mu tube would work better....
EF183
>
>
> Sensibly equivalent^¶
> <http://www.r-type.org/static/eqi-ex.htm> to:
>
>
> 6EH7 6F29 <http://www.r-type.org/exhib/aaq0272.htm> CV5831
>
> It can be shown theoretically that the gain of any radio frequency or
> intermediate frequency amplifier is almost exactly proportional to the
> mutual conductance of the valve used. Some of the first screen grid
> valves to be manufactured (such as the ARS6
> <http://www.r-type.org/exhib/aaj0048.htm> about 1927) had a mutual
> conductance of about 0.6 mA/Volt. The conventional high gain sharp
> cut-off pentodes such as the EF80
> <http://www.r-type.org/exhib/aaa0008.htm> and the 6AC7
> <http://www.r-type.org/exhib/aaa0053.htm> have a mutual conductance of
> about 7 to 10 mA/Volt. In the frame grid range, however, *the **EFI84
> <http://www.r-type.org/exhib/aai0086.htm>**has a mutual conductance of
> about 15 mA/volt. As a high frequency amplifier it will therefore give
> about twice the gain of a conventional high gain pentode, but this
> gain can be varied only within a limited range by the application of
> bias.*
>
> **
>
> *The advantages of the variable-mu **EF183
> <http://www.r-type.org/exhib/aai0110.htm>**are even more striking. The
> conventional **6K7 <http://www.r-type.org/exhib/aaa0353.htm>**or
> **EF39 <http://www.r-type.org/exhib/aad0089.htm>**type of valve has a
> maximum mutual conductance of about 2mA/volt.*
>
> **
>

> *The miniature **6BA6 <http://www.r-type.org/exhib/aaa0045.htm>**gives
> a higher gain as an RF amplifier because its maximum mutual
> conductance is about 4.4 mA/Volt. The EF183, however, has a maximum
> mutual conductance of about 13 mA/Volt. It will therefore give about
> three times the gain of a 6BA6 or about seven times the gain of a 6K7.
> The gain of an EFI83 amplifier can be varied over a wide range of values.*
>
>
> Frame Grid Construction
>
> The mutual conductance of a valve can be increased by a suitable
> choice of dimensions for the control grid. In order to obtain a high
> mutual conductance, the grid must be wound with very fine wire closely
> spaced and should be placed very near to the cathode in order that it
> can exert the maximum control over the electron stream. In addition,
> the dimensions of the grid must be very closely controlled, its
> manufacture becoming a matter of precision workmanship.
>
> The grid winding in conventional valves must be fairly thick so that
> it is strong enough to keep the supporting wires at the correct
> distance apart; this limiting the mutual conductance obtainable. In
> the frame grid valves, however, these difficulties are overcome by
> closely winding a very fine wire grid under tension on an accurately
> made frame of stout wires. The grid supporting wires are rigidly fixed
> to each other by means of sturdy cross rods.
>
>
> Other Advantages
>
> The input capacity of the frame grid valves is similar to that of
> conventional valves and they can therefore be used as RF amplifiers.
> They have an input impedance of about 10kΩ at 40 MHz. As RF
> amplifiers, the frame grid valves not only give high gain but they
> also have the advantage that the signal to noise ratio, at the output
> of the stage, may be considerably greater than that at the output of a
> similar stage using a conventional valve. The frame grid double triode
> ECC189 <http://www.r-type.org/exhib/aai0256.htm> is intended for use
> as a very low noise RF cascode amplifier at VHF. It has a mutual
> conductance of 12.5 mA/volt.
>
> The control characteristics of the frame grid valves are very good.
> For instance the PCC89 will handle about five times the signal which
> can be handled by a PCC84 <http://www.r-type.org/exhib/aaa0613.htm>
> Without any cross modulation.
>
> The danger of a valve becoming microphonic is less in the frame grid
> series because the fine wires under tension resonate at a frequency
> well above audio frequencies.
>

>
> TV Receivers
>
> Frame grid valves are especially useful in TV receivers. The four
> valves shown at the bottom of the page have been especially designed
> for this purpose. A receiver using the frame grid valves PCC89 (RF
> amplifier), PCF86 (mixer) and the EFI83 (IF amplifier) will be about
> eight times as sensitive (18dB) as a receiver using the PCC84, PCF80
> <http://www.r-type.org/exhib/aaa0252.htm> and the EF85
> <http://www.r-type.org/exhib/aaq0029.htm>.
>
> In fringe areas the use of frame grid valves may render the addition
> of extra front end amplification to a TV receiver unnecessary.
> Alternatively, if the local signal strength is fairly reasonable, a
> receiver using frame grid RF and mixer valves could employ one valve
> less (an IF amplifier) than a similar receiver employing conventional
> valves. As a matter of economics this is bound to interest TV receiver
> manufacturers.
>
> In addition to the above advantages, the use of frame grid valves in
> TV receivers will greatly reduce the possibility of sound
> break-through in the vision channel due to cross modulation.
>
>
> Conclusion
>
> It is to be expected that frame grid valves will have a very wide
> application in the future, especially in TV and other high frequency
> receivers. It is, however, somewhat doubtful if they will ever be used
> to any great extent in the ordinary 4+1 superhets, as the extra gain
> is not really required for most purposes.
>
> The writer would like to thank Messrs. Mullard Ltd. for sending him
> details about some of their frame grid valves.
>
>
> Valve Types
>
>
> PCC89
>
> PCC89 <http://www.r-type.org/exhib/aai0093.htm>: variable-mu RF double
> triode for use as cascode amplifier.
>
>
> PCF86
>
> PCF86 <http://www.r-type.org/exhib/aai0089.htm>: triode-pentode
> frequency changer.

>
>
> EF183
>
> EF183 <http://www.r-type.org/exhib/aai0110.htm>: variable-mu RF
> pentode for use as AGC controlled IF amplifier.
>
>
> EF184
>
> EFI84 <http://www.r-type.org/exhib/aai0086.htm>: straight pentode for
> use as IF amplifier.
>
> The Mullard series of Frame Grid valves intended for use in TV
> receivers. All of the above valves require a heater current of 300 mA
> and are therefore suitable for AC/DC series operation.
>
>

On 11/02/16 20:14, les.au49@... [regenrx] wrote:
>
>
> Hello Rile, Welcome to the regenerative receivers group! As I
> understand your question, you want to know how effectively the screen
> grid voltage controls the regeneration in your radio.
>
> I built a detector somewhat like yours, but using the Hartley circuit
> (where the cathode is connected to a tap, part-way up the coil. I
> followed Prof. Coro's recommendation for this circuit, (using a 6AK5
> detector and B+ supply of +36 volts). He wrote that this circuit
> worked very well indeed, and basing my answer on that AND my
> experience with the circuit I built I would say, "Very well indeed".
> Regeneration is very smooth. The receiver is very sensitive. In my
> set, the detector is most sensitive when the screen grid voltage is
> between 9 and 12 volts.
>
> HOWEVER, David Newkirk wrote that the pentode + Hartley circuit is
> superior to the pentode + Armstrong (tickler) circuit, because the
> screen grid acts as a shield for the anode. His point is that the
> plate circuit (in a perfect circuit) would have NO RF signal present.
> There is a little, of course, or the regeneration in your circuit
> wouldn't work.
>
> So - to answer your question a second time - controlling the
> regeneration by varying the screen grid voltage works very well. I
> suggest you go back thru the archives and search for postings by Arnie
> Coro, with keywords 6AK5 and pentode detector.
>
> 73 from Australia!
> Les

>
>

25827. RE: The EF184 Is worth trying as a Hartley regenerative detector with screen grid regeneration control !!!

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-12 02:00:09 UTC
From: Prof. Arnaldo Coro Antich
Topic: 25827 Message: 25827
Attachments: 3 described; binary payloads are missing from this source WARC

>
>
> ▾ Menu
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>
>
> *EF184*
>
>
> Sensibly equivalent^¶
> <http://www.r-type.org/static/eqi-ex.htm> to:
>
>
> 6EJ7 6F30 <http://www.r-type.org/exhib/aaa0462.htm> CV5810
>
>
> See also:
>
>
> Amplification and Valve Characteristics
> <http://www.r-type.org/addtext/add002.htm> - Television RF
> Valve Development <http://www.r-type.org/addtext/add063.htm>
> - Valves and their Habits
> <http://www.r-type.org/articles/art-012.htm> - Frame Grid
> Valves <http://www.r-type.org/articles/art-161.htm>
>
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>
> Extras ▾
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>
> The EF184 is a purpose designed high gain frame grid
> pentode. The EF184 superseded the ubiquitous EF80
> <http://www.r-type.org/exhib/aaa0008.htm>. The mutual
> conductance is 15.6 and the closely related (pin compatible)
> variable μ pentode EF183
> <http://www.r-type.org/exhib/aaa0362.htm> has a μ of 12.5.
>
>

> In 1969 Mullard describe the valve as: A frame-grid sharp
> cut-off pentode for use as an IF amplifier in television
> receivers. This implies a relatively wide band function at
> about 33 MHz. The high mutual conductance was important for
> wide band width amplifiers. Mullard quote operation at 40 MHz.
>
>
> The thin glass tube envelope is 20 mm in diameter and
> excluding B9A base pins, is 51 mm long. The electrode
> assembly is 13 mm top to bottom.
>
>
> References: Datasheet, ^3002
> <http://www.r-type.org/refs/ref3002.htm> & ^1040
> <http://www.r-type.org/refs/ref1040.htm>. Type EF184 was
> first introduced in 1960.
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>
> Pin Connections
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> B9A <http://www.r-type.org/static/baseb9a.htm>
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> <http://www.r-type.org/static/connect.htm>
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> Absolute Maximum Operating Conditions^¶
> <http://www.r-type.org/static/abs-max.htm>
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> Pentode <http://www.r-type.org/static/grid03.htm>
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> <http://www.r-type.org/pdfs/ef184.pdf>
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> /Thanks to Frank Philipse
> <http://www.r-type.org/STATIC/tubedata.htm> for supplying
> the above PDF datasheet./
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>
> Updated October 22, 2013.
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>
> Return to Main Index <http://www.r-type.org/index.htm>
>

25828. RE: [regenrx] RE: The EF184 Is worth trying as a Hartley regenerative detector with screen grid regeneration control !!!]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-12 02:18:15 UTC
From: Hubert Miller
Topic: 25828 Message: 25828

Arnie, a couple years back, rob (in Japan) tried a number of substitute tubes in his Knight Spanmaster regen, which has a 6BZ6 detector, no RF.

I don’t think he tried a 6EH7, but of all the tubes he tried, if i recall, the 6CB6 was very good, or maybe even best. So i suspect a higher transconductance

tube is maybe not the preferable way to go.

I have wondered if the 6EH7 might work well as a very low B+ regen detector. Maybe the transconductance in normal operation is so high that it would

even function with lowered filament voltage and plate voltage.

Many many years ago, when i was still in high school, i had a Lafayette HE-10/ KT-200 receiver, and i liked to wake up late at night and try for So. American

60 and 49 meter stations, especially looking for stations playing la musica andina, me gustaba tanto oir los huaynos y pasillos, and i replaced the 6BA6 RF in

the radio with a socket adapter and a 6EH7. That is one hot RF tube! I think i got the idea from an article in QST circa early 1960s. I think the article also

the 6EJ7 in mixer use. (The antenna was long and high, and this was before computer noise, BUT the antenna was oriented so its maximum reception

was from Colombia and Venezuela as well as the South Pacific.)

I have a Hallicrafters S-107 which has a rather unique RF ciruit: no RF stage, and the MIXER and IFs are 6BA6. (it did surprise me that the mixer was not

a sharp cutoff tube, more like a 6AU6..) I have been thinking it might be fun sometime to make a plug-in adapter and try a 6EJ7 in the mixer slot. I kind

of like that the circuit does not use an RF, but does use a mixer of lower noise than the usual 6BE6.

-Hue Miller

25829. Re: a first regenerative radio power supply advice

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-12 11:16:49 UTC
From: Prof. Arnaldo Coro Antich
Topic: 25829 Message: 25829

Hola amigo;
That power transformer will be OK ! There will be enough current
to run a typical vacuum tubes regenerative receiver with one
RF amplifier stage , the regenerative detector and the audio
amplifier module made with a triode-pentode tube or separate
tubes, one triode, and one output pentode...
The regulated DC supply for the filaments will be also OK...
I normally feed the filaments of the regenerative detector with
the regulated DC supply, and if I have enough current available
I also provide regulated DC to the audio tubes...
Again the audio module in a typical design may be a triode-pentode
in the same glass envelope like the ECL82 / 6BM8... or similar
and another alternative (that I often use too) may be implemented
with a triode like 6C4/EC92, or old 6C5 and the output audio tube
6V6/6AQ5/EL84....
The Faraday shield is nice to have, but not essential ....
Good luck with the drawing of the schematics !!!!
73 and DX
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On 11/02/16 23:10, Rajaram Bhat wrote:
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> The only power transformer I have been able to locate has a 125-0-125
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> circuits. Is it okay? The filter choke I was able to locate is 7H,
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> Regards,
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>> <mailto:coro@...>> wrote:

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>> of cardboard , then take a photo and send me the .jpg file
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>> Remember that the primary transformer voltage in your country
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>>>> feed the regenerative detector tube plate and screen circuits.
>>>> The power supply is built on a heavy metal chassis... preferred,
>>>> or you can wire it on a piece of plywood and tie the different
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>>>>> same tap with voltage dropping resistors? Do you use transistors
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>>>>>>> Regards,
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>>>>>>> Raj
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>>>>>>>
>>>>>>>> Begin forwarded message:
>>>>>>>>
>>>>>>>> *From: *"'Prof. Arnaldo Coro Antich' coro@... [regenrx]"
>>>>>>>> <regenrx@yahoogroups.com>
>>>>>>>> *Subject: **[regenrx] Re: [Glowbugs] BC-221 Homage and how to
>>>>>>>> use the capacitor and dial for a first regenerative radio*
>>>>>>>> *Date: *February 11, 2016 at 10:09:07 AM EST
>>>>>>>> *To: *Ejparagi@..., tetrode@...,
>>>>>>>> regenrx@yahoogroups.com
>>>>>>>> *Reply-To: *regenrx@yahoogroups.com
>>>>>>>>
>>>>>>>> Hola amigo !
>>>>>>>> Sure... great idea... and easy to put in practice...
>>>>>>>> My projects now are aiming at helping the young and not so young
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>>>>>>>> hit of course, but it left the radio dead for all practical
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>>>>>>>> For example the RC resistor capacitor circuit at the grid of the
>>>>>>>> regenerative detector will tolerate large deviations in values
>>>>>>>> from the optimum ones.... My preference for general reception
>>>>>>>> is to go for a small value capacitor , less than 100 picofarads
>>>>>>>> and a resistor at least 1 megaOhm... but the radio will work
>>>>>>>> with 50 pF and 2,2 megaOHm etc etc...
>>>>>>>> The favorite regenerative detector is the Hartley.... with a
>>>>>>>> pentode
>>>>>>>> using screen grid control of the regeneration...
>>>>>>>> If you need any advice to start building your own regenerative
>>>>>>>> receiver, just send an email amigo...
>>>>>>>> No doubt that vacuum tubes regenerative are mucho , mucho more
>>>>>>>> better than solid state versions !!!!
>>>>>>>> Some of my regenerative detectors have started to receive
>>>>>>>> with less than 12 volts applied to the plate of the pentode...
>>>>>>>> but running around 24 to 50 volts or so is better...
>>>>>>>> I divide the project into several ¨modules¨ ... and build them
>>>>>>>> individually, then test them, and then do like at the aircraft
>>>>>>>> factories... integrate the modules into the receiver....
>>>>>>>> The typical regenerative with a Hartley detector uses
>>>>>>>> one 6AK5/5654 or Soviet 6ZHE1P pentode , and an audio
>>>>>>>> module built using a triode/pentode that comes in a single
>>>>>>>> glass envelope... The power supply module has three outputs
>>>>>>>> 6.3 volts AC, 6.0 volts regulated DC for the regenerative
>>>>>>>> detector tube filaments, and the B plus that provides 140
>>>>>>>> volts DC for the audio tubes, and 36 volts regulated for the
>>>>>>>> detector plate and screen....
>>>>>>>> Winding the coils for the detector is a lot of fun... especially
>>>>>>>> because you must optimize the cathode tap on the coil...

>>>>>>>> in general to start testing , wind 20 turns of enamel wire
>>>>>>>> about no. 18 or no.20 on a 25 mm diameter plastic white
>>>>>>>> PVC tube... the antenna link is separated from the main coil
>>>>>>>> by about 5 millimeters (this is for the first test, because later
>>>>>>>> you will want to build a variocoupler to bring the signal from
>>>>>>>> the antenna into the grid tuned circuit...
>>>>>>>> The great attraction of this project is that it will practically
>>>>>>>> always ¨work¨ and there are very few chances of spoiling
>>>>>>>> parts (like what happens with solid state components
>>>>>>>> irreversibly damaged by just a little mistake)
>>>>>>>> Start by studying the circuit , then gather the parts, and
>>>>>>>> begin by assembling the power supply... testing it, and then
>>>>>>>> proceed with the audio amplifier module...
>>>>>>>> The RF module is the last to be built !!!
>>>>>>>> 73 and DX
>>>>>>>> Arnie Coro
>>>>>>>> CO2KK
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>

25830. Armstrong Regeneration and Screen-Voltage Detector Control

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-12 17:25:27 UTC
From: J Ed
Topic: 25830 Message: 25830

Hello all,

I'm contemplating another regenerative receiver design to make soon. Here's a link to a schematic that will be similar to my detector stage. I intend to control the oscillation with voltage to the screen.

http://www.angelfire.com/electronic/funwithtubes/Regen_det.html

I intend to use an Armstrong-type feedback mechanism as shown. One thing I intend to do differently is to have plug-in coils with a fixed capacitance across each one. The fixed capacitance has been calculated in order to reduce the tuning range. Using a small variable capacitance of 8-40 pF, I'll be able to realize ranges of 500-750 KHz instead of several MHz per coil.

Is there a reliable way to determine the number of turns on the tickler coil? I've built many regenerative detectors and have had problems making some of them oscillate. It's possible that I didn't have a strong enough tickler winding, therefore not enough fed back signal to make the thing oscillate.

Also, I have had problems with this particular design. As you increase the pot on the screen, the voltage increases and the tube conducts more. There's a point at which the tube conducts the most and I hear the strongest signal output. After that, any further advancement on the control lessens the signal. It's because the 100K resistor in the plate circuit causes the plate voltage to drop, reducing its effectiveness while increasing screen current. I'm not sure if there's anything that can be done about it, though.

I would appreciate shared experience with these problems. My intended tubes are 6EH7 and 12AU7 or something similar. I could also use 6SN7 and some octal pentode, too. I'm pretty sure I want to use 9 pin tubes, though.

Ed AE7TE

25831. Re: [regenrx] Re: a first regenerative radio power supply advice

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-12 17:40:26 UTC
From: Rajaram Bhat
Topic: 25829 Message: 25831

Dear Prof. Coro:

Thank you for feedback and encouragement.

Regards,

Raj

> On Feb 12, 2016, at 6:16 AM, 'Prof. Arnaldo Coro Antich' coro@... [regenrx]
<regenrx@yahoogroups.com> wrote:
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>>>>>>>>> with 50 pF and 2,2 megaOHm etc etc...
>>>>>>>>> The favorite regenerative detector is the Hartley.... with a pentode
>>>>>>>>> using screen grid control of the regeneration...
>>>>>>>>> If you need any advice to start building your own regenerative
>>>>>>>>> receiver, just send an email amigo...
>>>>>>>>> No doubt that vacuum tubes regenerative are mucho , mucho more
>>>>>>>>> better than solid state versions !!!!
>>>>>>>>> Some of my regenerative detectors have started to receive
>>>>>>>>> with less than 12 volts applied to the plate of the pentode...
>>>>>>>>> but running around 24 to 50 volts or so is better...
>>>>>>>>> I divide the project into several ¨modules¨ ... and build them
>>>>>>>>> individually, then test them, and then do like at the aircraft
>>>>>>>>> factories... integrate the modules into the receiver....
>>>>>>>>> The typical regenerative with a Hartley detector uses
>>>>>>>>> one 6AK5/5654 or Soviet 6ZHE1P pentode , and an audio
>>>>>>>>> module built using a triode/pentode that comes in a single
>>>>>>>>> glass envelope... The power supply module has three outputs
>>>>>>>>> 6.3 volts AC, 6.0 volts regulated DC for the regenerative
>>>>>>>>> detector tube filaments, and the B plus that provides 140
>>>>>>>>> volts DC for the audio tubes, and 36 volts regulated for the
>>>>>>>>> detector plate and screen....

>>>>>>>>> Winding the coils for the detector is a lot of fun... especially
>>>>>>>>> because you must optimize the cathode tap on the coil...
>>>>>>>>> in general to start testing , wind 20 turns of enamel wire
>>>>>>>>> about no. 18 or no.20 on a 25 mm diameter plastic white
>>>>>>>>> PVC tube... the antenna link is separated from the main coil
>>>>>>>>> by about 5 millimeters (this is for the first test, because later
>>>>>>>>> you will want to build a variocoupler to bring the signal from
>>>>>>>>> the antenna into the grid tuned circuit...
>>>>>>>>> The great attraction of this project is that it will practically
>>>>>>>>> always ¨work¨ and there are very few chances of spoiling
>>>>>>>>> parts (like what happens with solid state components
>>>>>>>>> irreversibly damaged by just a little mistake)
>>>>>>>>> Start by studying the circuit , then gather the parts, and
>>>>>>>>> begin by assembling the power supply... testing it, and then
>>>>>>>>> proceed with the audio amplifier module...
>>>>>>>>> The RF module is the last to be built !!!
>>>>>>>>> 73 and DX
>>>>>>>>> Arnie Coro
>>>>>>>>> CO2KK
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>

25832. A few comments about your message to the list explaining the use of an Armstrong regenerative

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-12 18:10:29 UTC
From: Prof. Arnaldo Coro Antich
Topic: 25832 Message: 25832

Dear amigo Ed---
Please notice that you have a fixed 200 pF capacitor to return
to ground the tickler coil !!!
My advice is to try to use instead an air spaced variable capacitor
of around 300 picofarads if your radio is for the AM broadcast band.
Then you will have not one but TWO regeneration controls... this
new variable capacitor and the already existing 100 kiloohms
screen grid voltage control.
I also suggest replacing the 100 kiloohms fixed plate resistor with
a high inductance choke.... The value of that part may be as
high as 300 Henry , or as low as 10 Henry.... and in both cases
in my opinion it is a better option than a fixed carbon load resistor
for the plate circuit.
That's about the Armstrong regenerative circuit...
BUT, I prefer to use the same pentode regenerative detector
as a Hartley oscillator circuit... using coils that have three terminals
one to ground, one a tap to the cathode of the tube, and the upper
end going to the number one grid .
The Hartley when properly set up (experimenting with the position
of the cathode tap) in my opinion provides a very smooth regeneration
by the variation of the screen grid voltage... For example using the
triode section of an ECH83 tube, a very nice performance is
achieved with just 36 volts on the plate and the screen grid voltage
moving from 3 to 15 volts....
If you need more information about the values used by this
circuit , the Hartley regenerative with a pentode tube,just
send an e'mail
73 and DX
Arnie Coro
CO2KK

Hello all,

I'm contemplating another regenerative receiver design to make soon.
Here's a link to a schematic that will be similar to my detector
stage. I intend to control the oscillation with voltage to the screen.

http://www.angelfire.com/electronic/funwithtubes/Regen_det.html

I intend to use an Armstrong-type feedback mechanism as shown. One
thing I intend to do differently is to have plug-in coils with a fixed
capacitance across each one. The fixed capacitance has been calculated
in order to reduce the tuning range. Using a small variable
capacitance of 8-40 pF, I'll be able to realize ranges of 500-750 KHz
instead of several MHz per coil.

Is there a reliable way to determine the number of turns on the tickler coil? I've built many regenerative detectors and have had problems making some of them oscillate. It's possible that I didn't have a strong enough tickler winding, therefore not enough fed back signal to make the thing oscillate.

Also, I have had problems with this particular design. As you increase the pot on the screen, the voltage increases and the tube conducts more. There's a point at which the tube conducts the most and I hear the strongest signal output. After that, any further advancement on the control lessens the signal. It's because the 100K resistor in the plate circuit causes the plate voltage to drop, reducing its effectiveness while increasing screen current. I'm not sure if there's anything that can be done about it, though.

I would appreciate shared experience with these problems. My intended tubes are 6EH7 and 12AU7 or something similar. I could also use 6SN7 and some octal pentode, too. I'm pretty sure I want to use 9 pin tubes, though.

Ed AE7TE

Posted by: J Ed <jedwardsat1@...>

25833. Re: [regenrx] A few comments about your message to the list explaining the use of an Armstrong regenerative

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-12 19:01:34 UTC
From: J Ed
Topic: 25832 Message: 25833

Arnie,

Thanks for the reply. I did use a Hartley once in my last serious Regen project. It was a 12AT7 and 12AU7, with the first tube as an RF amp / Detector and the second tube as a two-stage audio amp. It worked well but didn't like to oscillate much on the higher bands. I still picked up AM stations at a very high frequency but I never bothered checking how high it went.

The whole thing was powered by a 24 volt power pack. I want to use a real B+ for my next regen (real meaning 300-ish volts).

If I had a spare audio choke lying around (or even a power transformer I wasn't using) I might use it for the plate. The resistor method works for some people and I'm not so sure why it didn't work for me. Maybe I need to play with it some more.

As for the throttle capacitor, I've seen some people do it that way. I'm more interested in keeping the operation simpler.

Ed AE7TE

On Fri, Feb 12, 2016 at 9:10 PM, 'Prof. Arnaldo Coro Antich' coro@... [regenrx] <regenrx@yahoogroups.com> wrote:

>
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> tubes, though.
>
> Ed AE7TE
>

> ------------------------------------
> Posted by: J Ed <jedwardsat1@gmail.com>
> ------------------------------------
>
>
>

25834. Re-post of my Regen Project info/pictures

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-12 20:19:34 UTC
From: Phil
Topic: 25834 Message: 25834

On my Beacon mail list it was requested that I post (actually re-post) the information on the tube type regen receiver I designed/built this past summer. I thought it might be of interest to some folks here.

NOTE: This is basically a re-post of material I posted here in the past.

I DO still want to draw a schematic of the unit to share here, perhaps if I ever locate/download Tubepad or similar I'll be able to. . .
****
Good Mornin' (afternoon for you) Václav

Thank you for asking about my receiver. No manual, no schematic. When I designed/built it, I first sat down and figured out exactly what I wanted it to do, specifically be an above average regen designed for NDB DXing. A real tool, not a 1 or two tube 'novelty' set that would sit on the shelf and not be used. The ability to work other bands if desired was also on the list, which dictated the use of plug-in coils. More CW selectivity than a regen usually has, and the ability to drive either a speaker or modern low impedance headphones were also desired. BUT MOST IMPORTANT TO ME, I wanted the set to be based ENTIRELY on technology available to the experimenter in the 1930's, NO solid state active stages. I DID use silicon rectifiers in the PS simply because the transformer I used wouldn't support rectifier tube filaments etc.

Then I drew up a basic block diagram, knowing that the exact circuit would depend heavily on what electronic components I could obtain. So at this stage I didn't draw any schematics, but came up with a basic list of parts that I would need.

As project cost was going to be expensive IF I had to buy everything new, I then went on a scavenger hunt to see what I could scrounge up. I put a want list in our local ham radio newsletter, as well as some of the vintage radio and boatanchor mail lists I belong to, wanting to purchase old parts. Things like tube sockets, power transformer, audio output transformer, tuning capacitor and so forth.

This paid off nicely in a quite unexpected way. A man in Washington State offered me some adjustable 10H audio chokes, suitable for a 'passive' audio CW filter. Sent me three of them and they immediately became the components around which the entire receiver was designed. With capacitors they would form a parallel resonant circuit. They were tapped allowing the filter to have a low input impedance (plate) and high output impedance (grid of next stage). He also sent me an Emmco vernier tuning dial from the 1920's.

An almost local ham friend told me had a lot of stuff on my list, tubes, tube sockets, power and output transformers, old military style black

Bakelite knobs, potentiometers, etc, free for pick-up. Needless to say I drove the ~30 miles to get them.

Now things were starting to come together (this was a long summer project, NOT one to quickly complete). I took the stuff that I had gathered and laid them out on the workbench to get an idea of what sized chassis I would need. For rigidity/stability a good aluminum chassis was important. I ended up buying one that was 12x8 inches along with two aluminum bottom covers (one to use as a front panel). I thought it might be a bit large for the project, but in the end turned out to be the perfect size. At about $50 it was also the single most expensive item in the project, but I felt a necessity .

Once I had everything on hand I hand drew up the basic schematic of each stage, knowing that some of the circuits would be tweaked once I got the set working.

Next step was to set all the major components on the chassis to figure out the best layout. Important to keep the RF amp and detector stages as far as possible from the power supply (regen detectors are prone to hum pickup).

NOT a single hole was cut until I felt I had a good layout. I then drilled all the holes for the tube sockets, controls, transformers etc. NOTE: Not having any Greenlee chassis punches like I had as a kid in the '50s (they're VERY expensive now) I was told that a step drill like Harbor Freight sells is a VERY good, and possibly superior alternative. Reasonable in cost, effective, I now have five of them in different sizes, from a small 1/8" to a large 1-3/8". I even sent a couple to another member of this list so he could punch some tube socket holes.

I even drilled the holes to mount the Emmco tuning dial. NOTE: After I built the set I found that even with a lot of tweaking, lubrication etc, with it's relatively small tuning knob the dial was a bit too stiff to allow my arthritic fingers to tune it for long periods of time (remember, I said this radio was being built as a serious DXing tool). So I ordered a couple used National Vernier Reduction Drives from surplus WWII equipment and installed one. MUCH better and smoother, meant I had to enlarge the mounting hole and relocate the tuning capacitor slightly. . .

OK, I won't go into detail about how each stage was tweaked as I went along. But here's a description of each stage and what it does, following signal flow through the set.

1. 6AK5 tube, untuned Grounded Grid RF amplifier. Not there for gain, but to isolate the antenna from the following detector stage. A regen detector has high gain and easily overloads. The RF gain control is a Potentiometer in the cathode input circuit. There is also a 580KHz wavetrap at the cathode as 580 KMJ in Fresno (a 50kW station about 60 miles away) tended to bleed through on the high end of the NDB band.

2. 1/2 12AU7 dual triode. Armstrong Regen detector stage. The classic regen detector with tuned grid coil and a tickler coil in the plate circuit. Some other circuits, such as a Colpitts or Hartley were suggested to me on the Regen mail list, but I settled on the classic Armstrong circuit. Some folks have had problems with the circuit smoothly going into oscillation, but mine works VERY well (think it depends on the exact circuit parameters as to how smooth it is). This one is also EXTREMELY stable, after a short warmup of a few minutes, in oscillating mode it NEVER drifts more than a hundred Hz or so. NOT at all bad for a tube type free running oscillator!!! Of course this is at LF, it would probably be a different story at HF and above frequencies.

3. 1/2 12AU7 dual triode. Cathode follower loosely coupled to the plate of the Detector tube. It's output feeds a BNC connector on the back panel so that an external frequency counter can measure the actual receiver frequency when the detector is oscillating. NOT really out of the spirit of designing the set with '30s technology as it doesn't have any effect on how the set itself performs. It's there to facilitate dial calibration or to quickly tune the set to a desired frequency. I rarely use it in actual listening as it only works when the set is strongly oscillating, otherwise the counter just bounces around.

4. 1/2 12AT7 dual triode. First audio stage, audio filter driver. Not a lot to say about this one, it does what all audio amplifiers do, and it isolates the detector stage from the audio filter stage.

5. Passive audio stage. This is comprised of a 6 position switch, three parallel tuned circuits resonant at 400, 600 & 1020 Hz, and two RC Low-Pass-Filters (treble cut-off). First position bypasses all audio filtering, but I never listen in that "wide" position. Most of my listening is in the narrowest LPF position (treble-cut), switching to one of the bandpass filters when needed. The audio filtering is VERY effective in digging out weak beacons.

6. 1/2 12AT7 dual triode. 2nd audio amplifier stage brings the audio level back up after the losses introduced by the audio filters. The volume control is located between the audio filter and this stage. The set was intentionally designed with more AF gain than needed. At first the volume control was between the detector and first audio stages, but hum from the audio chokes in the filter was objectionable, especially in the headphones. Even though the chokes are in a shielded steel box, they still get 'some' hum from the nearby power transformer. Changing the gain distribution in the set by relocating the volume control completely removed it.

7. 6AQ5 audio output stage. Again, this section does just what it should, provide sufficient power to drive a speaker or modern headphones.

8. 0B2 Voltage regulator tube. Provides a stable 105 Volts to both the RF amplifier and detector stages. This is probably one of the contributors to the excellent stability of the receiver!

9. Rectifier stage. Uses 4 1N4007 diodes in a bridge configuration. My one concession to modern electronics in the set. The 'donated' transformer did NOT allow for a full wave tube rectifier, but I wanted full wave rectification as it is much easier to filter 120Hz than it is 60Hz. There is also a large DC filter choke in the B+ filtering circuit and VERY heavy filtering via the over-sized filter capacitors. That along with the 0B2 regulator means that the DC supplied to the radio is essentially "battery pure".

10. Filament circuit. As I mentioned, regen receivers are prone to hum and noise, often coupled from the filaments of the tubes. Part of the problem is that one side of the filament circuit often uses the chassis as a conductor, a bad design.

In this set I floated both sides of the 6.3 Volt filaments above ground, wiring with twisted wires. At the 12AU7 tube, both sides of the filament line is bypassed to ground with capacitors. In addition, there is a 100 Ohm pot wired across the filament lines, and the wiper is connected to the chassis ground. This is a "hum balance" control and is common in many older audio amplifier designs. The result is that between the well filtered B+ and the design of the filament circuit, there is NO audible hum in the receiver at all (outside of the aforementioned bit from the audio filter chokes, now almost completely gone).

FINAL NOTE: I've been asked a number of times if I'd draw up a schematic, and somebody suggested using "tubepad" software to do it. I've wanted to, need to locate the software, THEN FIND THE TIME TO DO IT

Pictures of the radio may be found here. . . You do NOT need a Photobucket membership to view/download the files.
http://s38.photobucket.com/user/ko6bb/library/Tube%20Type%20LF%20Regenerative%20Receiver

--
73 From "The Beaconeer's Lair"
Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)

PRESENT RADIOS:
Grundigs: S-350 (~2006), G6 (2011) & S450DLX (2014).
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
Icom: IC-735 Transceiver (~1990).
Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2005)
Icom: IC-7200 Transceiver (~2015).
R-Shack: DX-380 digital portable (~1990).
SDR: Softrock Ensemble II LF (built from a kit 2015).
Zenith: Royal-7000 Transoceanic Portable (~1968).

ACCESSORIES: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 8 Hz Audio Filter.

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.

37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

25835. Re: [regenrx] Re-post of my Regen Project info/pictures

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-12 20:57:55 UTC
From: Michael
Topic: 25834 Message: 25835

Phil, great-repost and update. Send me a US passport and I will
vote for you as next President :-)

Every one of your thousand words is valued. Yet, if you could
hand-sketch the schematic, digi-photograph and post it, for one,
this still small voice would be extatic.

Michael
on an island, east of The Pond

On 12.02.16 20:19, Phil ko6bb1@... [regenrx] wrote:
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> the information on the tube type regen receiver I designed/built this
> past summer. I thought it might be of interest to some folks here.
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> should, provide sufficient power to drive a speaker or modern headphones.
>
> 8. 0B2 Voltage regulator tube. Provides a stable 105 Volts to both the
> RF amplifier and detector stages. This is probably one of the
> contributors to the excellent stability of the receiver!
>
> 9. Rectifier stage. Uses 4 1N4007 diodes in a bridge configuration.
> My one concession to modern electronics in the set. The 'donated'
> transformer did NOT allow for a full wave tube rectifier, but I wanted
> full wave rectification as it is much easier to filter 120Hz than it is
> 60Hz. There is also a large DC filter choke in the B+ filtering circuit
> and VERY heavy filtering via the over-sized filter capacitors. That
> along with the 0B2 regulator means that the DC supplied to the radio is
> essentially "battery pure".
>
> 10. Filament circuit. As I mentioned, regen receivers are prone to hum
> and noise, often coupled from the filaments of the tubes. Part of the
> problem is that one side of the filament circuit often uses the chassis
> as a conductor, a bad design.
>
> In this set I floated both sides of the 6.3 Volt filaments above ground,
> wiring with twisted wires. At the 12AU7 tube, both sides of the
> filament line is bypassed to ground with capacitors. In addition, there
> is a 100 Ohm pot wired across the filament lines, and the wiper is
> connected to the chassis ground. This is a "hum balance" control and is
> common in many older audio amplifier designs. The result is that
> between the well filtered B+ and the design of the filament circuit,
> there is NO audible hum in the receiver at all (outside of the
> aforementioned bit from the audio filter chokes, now almost completely
> gone).
>
> FINAL NOTE: I've been asked a number of times if I'd draw up a
> schematic, and somebody suggested using "tubepad" software to do it.
> I've wanted to, need to locate the software, THEN FIND THE TIME TO DO IT
>
> Pictures of the radio may be found here. . . You do NOT need a
> Photobucket membership to view/download the files.

> http://s38.photobucket.com/user/ko6bb/library/Tube%20Type%20LF%20Regenerative%20Receiver
>
>
> --
> 73 From "The Beaconeer's Lair"
> Phil, KO6BB
> http://www.qsl.net/ko6bb/ (Web Page)
>
> PRESENT RADIOS:
> Grundigs: S-350 (~2006), G6 (2011) & S450DLX (2014).
> HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
> Icom: IC-735 Transceiver (~1990).
> Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2005)
> Icom: IC-7200 Transceiver (~2015).
> R-Shack: DX-380 digital portable (~1990).
> SDR: Softrock Ensemble II LF (built from a kit 2015).
> Zenith: Royal-7000 Transoceanic Portable (~1968).
>
> ACCESSORIES: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
> HOMEBREW 8 Hz Audio Filter.
>
> ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
> Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
> 37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.
>
> Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh
>
>

25836. Re: [regenrx] Re: ECH83 Regen and try testing regenerative detectors with frame grid tubes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-13 00:52:51 UTC
From: les.au49@...
Topic: 25822 Message: 25836

G'day Prof Coro (and others),
Thank you for your invitation to try the 6EJ7 (& co) pentode as a detector.
I'll say "no" until I have test equipment that will allow me to measure the effect of small changes to my sets.

Let me explain: Before now I mentioned experiments with coil and capacitor - pages published by a Dutch experimenter. His experiments focus on measuring and improving the "Q" of a tuned circuit. Using only simple equipment (signal generator, C.R.O. and so on) his pages describe the process of imrpoving the "Q" of a coil & capacitor to the point where he achieved a "Q" in the order of 1000. That was from a starting "Q" of about 150.

The point here is that each experiment only gained a few "Q" points ("Q" points are imaginary numbers, of course, but I think you understand my words well enough). I think it would be impossible to measure the improvement without his simple test gear - a signal generator, C.R.O. and detector probe.

I believe the same is true for the simple regen sets we build. We can build, test and observer - but without reliable measurements we can't accurately say, "This is an improvement". There is the question of selectivity - discussed here from time to time. Some say selectivity can't be measured using a regen set, beacause "Q" varies with the setting of the regen control. True but it IS possible to measure in at a particular setting. I say, "I'm going to do it." When I make these observations I DO hope I can develop the same careful style of observation used by our Dutch friend. Reading about his experiment is a delight - such careful planning, such simple improvements - all leading to a completely unexpected result! Who would imagine it was possible to obtain a tank circuit with such a high "Q".

For that moment that's what I'm going to do - focus on getting simple gear to make this sort of measurement. Then - and only then - I think it's worthwhile comparing tube types.

73 to you from Australia!

Les

25837. Re: EF183 tube Regen Circuits and further information about tips towards an optimized regenerative

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-13 01:51:53 UTC
From: Prof. Arnaldo Coro Antich
Topic: 25837 Message: 25837

Dear amigo Frank W4NPN
Nice to hear from you and learn about your interest to build
vacuum tubes regenerative receivers.
Amigo from Italy , Cris, circuit diagram is a REGENERODYNE...
a receiver that has a classic HF mixer and local crystal oscillator
feeding a regenerative detector.
Then this is followed by enough audio gain as you want to
provide enough output for a loudspeaker.
In the case of the ECH83 and ECH81, you feed the triode
tube from the mixer, and do the actual tuning by means of
the regenerative detector that has a plate voltage control
to adjust the operating point .
This circuit works very well, but you are tied to having quartz
crystals for the frequencies that you want to pick up.
Let me explain... with a 5 megaHertz crystal , and having the
tuning range of the triode regenerative detector covering from
2 to 2.5 or maybe 2 to 3.0 megaHertz, then you can listen to
7.0 to 7.5 megaHertz or 7 to 8.0 megaHertz. Then there is also
the option of REVERSE TUNING:... by subtracting 2 megaHertz
to the 5 megaHertz , you can tune 3.0 to 3.5 or 3.0 to 4.0 megaHertz
In this case the receiver tunes ¨backwards¨ You will need to
make the input rf circuits resonant to the frequency range you
want to pick up.
If you ask me about what is the best vacuum tube regenerative
detector, I can pass along my experience of many experiments...
Using a 6AK5 / 5654 /6ZHE1P in the Hartley configuration, with
the carefully set cathode tap on the tuning coil and using
a high quality potentiometer to control de screen grid voltage
with about 20 to 50 volts on the plate (again experimenting is
worth the time and it is a lot of fun) you will find that the
screen grid voltage variation between about 3 to 5 volts and
up to about 20 to 25 volts will produce a really very smooth
transition from straight amplification (grid leak detector)
to a regenerative detector that can be set at the very sweet
spot that provides razor sharp selectivity and still will not
be oscillating ....
Also the power supply will require a lot of attention amigo Frank
something often neglected by builders that then say that
the regenerative receivers do not work very well.....
Build them like a battleship, use a lot of shielding between stages,
remember to use regulated DC on the filaments of the detector
tube and if possible on the audio stages also... something that
nowadays is very easy to do with the typical IC integrated voltage
regulators.... The voltage for the plate and the screen of the

regenerative detector MUST also be well regulated.... from a
gas discharge tube, like a OA2 etc. or by means of Zener diodes...
Again , my advice is to build your power supply separate from the
RF and Audio modules.... and it will provide you with a nice
unit ready to be connected to whatever experiments you want to
put in practice... The B plus for the audio module not to exceed
150 volts... better yet try around 100 to 120 volts DC non regulated...
The ¨high voltage¨ uses 4 silicon diodes of type 1N4007 with
,01 disc ceramic capacitors in parallel, then two high capacity
electrolitics and a 7 to 15 Henry choke.... I use recycled
capacitors from computer power supplies, typically around 220
microfarads or more at no less than 250 volts or higher... Use them
ONLY after measuring their ESR, equivalent series resistance...
Hope this helps you amigo...
Winding the coils is a lot of fun !!!
AND... a good quality air spaced variable capacitor with a
very good dial mechanism is essential to achieve the best
possible results.... I have ARC-5 receivers and transmitters
capacitors, but better yet , try to hunt for a BC221 heterodyne
frequency meter or the similar LM or the Russian CHA4-1
clone...
73 and DX
Your friend in La Habana
Arnie Coro
CO2KK

On 12/02/16 20:04, Frank Barnes wrote:
> Dear Professor, I've been following the Glowbugs emails about using
> the EF183 for a Regen receiver. I just bought two new ones for $1
> each as I have plans to build a tube regen (I have several solid state
> regens I built) for short wave, 6 - 15 mhz range would be best; but at
> least to cover the 7mhz ham band.
>
> I'm wondering if you have any EF183 regen schematics you would be
> willing to share or point me to.
>
> I have the schematic that Cris Greggio has shared with Glowbugs but am
> wondering if there are others. A Google search did not reveal much.
>
> Also, I really appreciate all your comments about regens, power
> supplies, etc. Keep them coming!
>
> Thanks
> Frank
> W4NPN
>
> --
> Frank Barnes
> W4NPN
> Chapel Hill, NC

> Grid Square FM05
> Cell 919.260.7955

25838. A few comments about your message to the list explaining the use of an Armstrong regenerative

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-13 17:34:22 UTC
From: Prof. Arnaldo Coro Antich
Topic: 25832 Message: 25838

Dear amigo Ed---
Please notice that you have a fixed 200 pF capacitor to return
to ground the tickler coil !!!
My advice is to try to use instead an air spaced variable capacitor
of around 300 picofarads if your radio is for the AM broadcast band.
Then you will have not one but TWO regeneration controls... this
new variable capacitor and the already existing 100 kiloohms
screen grid voltage control.
I also suggest replacing the 100 kiloohms fixed plate resistor with
a high inductance choke.... The value of that part may be as
high as 300 Henry , or as low as 10 Henry.... and in both cases
in my opinion it is a better option than a fixed carbon load resistor
for the plate circuit.
That's about the Armstrong regenerative circuit...
BUT, I prefer to use the same pentode regenerative detector
as a Hartl

Hello all,

I'm contemplating another regenerative receiver design to make soon.
Here's a link to a schematic that will be similar to my detector
stage. I intend to control the oscillation with voltage to the screen.

http://www.angelfire.com/electronic/funwithtubes/Regen_det.html

I intend to use an Armstrong-type feedback mechanism as shown. One
thing I intend to do differently is to have plug-in coils with a fixed
capacitance across each one. The fixed capacitance has been calculated
in order to reduce the tuning range. Using a small variable
capacitance of 8-40 pF, I'll be able to realize ranges of 500-750 KHz
instead of several MHz per coil.

Is there a reliable way to determine the number of turns on the
tickler coil? I've built many regenerative detectors and have had
problems making some of them oscillate. It's possible that I didn't
have a strong enough tickler winding, therefore not enough fed back
signal to make the thing oscillate.

Also, I have had problems with this particular design. As you increase
the pot on the screen, the voltage increases and the tube conducts
more. There's a point at which the tube conducts the most and I hear
the strongest signal output. After that, any further advancement on
the control lessens the signal. It's because the 100K resistor in the
plate circuit causes the plate voltage to drop, reducing its
effectiveness while increasing screen current. I'm not sure if there's

anything that can be done about it, though.

I would appreciate shared experience with these problems. My intended tubes are 6EH7 and 12AU7 or something similar. I could also use 6SN7 and some octal pentode, too. I'm pretty sure I want to use 9 pin tubes, though.

Ed AE7TE

Posted by: J Ed <jedwardsat1@...>

25839. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-14 09:50:14 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 25839

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Ceramic Resonator Regen Trcvr.pdf
Uploaded by : qrper723 <qrper723@...>
Description : VK3YE's Regen-Trcvr "Clone"

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Ceramic%20Resonator%20Regen%20Trcvr.pdf

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

qrper723 <qrper723@...>

25840. VK3YE's Ceramic Resonator Regen "Clone"

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-14 09:57:32 UTC
From: qrper723@...
Topic: 25840 Message: 25840

I've built the receiver section today. It works well. Very sensitive and stable. I added the attenuator and using BC547s from my stock. Sorry but I feel my version is not a "Single Signal". Both CW sideband has receiverd well. hi...Anyway I will continue to test this receiver.

Thanks Rob "KB3BYT" for sharing your resonator!

I put my schematic into file folder.

73,
ja9mat Hidehiko.

25841. Re: VK3YE's Ceramic Resonator Regen "Clone"

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-14 10:37:08 UTC
From: qrp.gaijin@...
Topic: 25840 Message: 25841

In regenrx@yahoogroups.com, <qrper723@...> wrote :

> I've built the receiver section today. It works well.
> Very sensitive and stable. I added the attenuator and
> using BC547s from my stock. Sorry but I feel my version
> is not a "Single Signal". Both CW sideband has receiverd
> well. hi...Anyway I will continue to test this receiver.

I think you could probably make this into a kind of single-signal receiver by using the ceramic-resonator as a Q-multiplier, and injecting a separate BFO signal (which might be generated by another ceramic resonator VXO). Adjust the Q-multiplier just below oscillation, and tune it to peak your signal of interest, making sure it stays below oscillation. Then, turn on the BFO (injected into the Q-multiplier) and adjust it until you hear the beat note. If you do this, you should be able to notice that signals on one side of zero beat are stronger than on the other side of zero-beat, i.e. some degree of opposite-sideband suppression. It's easiest to notice if you manually sweep a signal generator across the regen's passband. You can also tune the below-threshold Q-multipler to peak individual CW signals. It's also fun to connect the AF output of your regen to an AF spectrum analyzer (like one on your PC) and observe the location and strength of your Q-multiplier-generated peak, as you tune the below-threshold Q-multiplier across the band.

I tested this a few years ago with a normal LC-resonator regen and an LC-resonator BFO, and got around 20 dB of opposite sideband rejection if I recall correctly.

Dave Newkirk has pointed out before that this kind of below-threshold regenerative selectivity collapses in the face of strong signals, which limits its usefulness, because strong signals are exactly the case where selectivity is most needed. That said, it's possible your ceramic resonator regen may be more resistant to overload than an LC regen.

Anyway, it's worth a try (below-threshold regen + offset BFO) if you enjoy playing with regenerative selectivity.

Best regards,
qrp.gaijin@yahoo.com
http://qrp-gaijin.blogspot.com http://qrp-gaijin.blogspot.com

---In regenrx@yahoogroups.com, <qrper723@...> wrote :

I've built the receiver section today. It works well. Very sensitive and stable. I added the attenuator and using BC547s from my stock. Sorry but I feel my version is not a "Single Signal". Both CW sideband has receiverd well. hi...Anyway I will continue to test this receiver.

Thanks Rob "KB3BYT" for sharing your resonator!

I put my schematic into file folder.

73,
ja9mat Hidehiko.

25842. File at YAHOO Group does not open

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-14 13:00:28 UTC
From: Prof. Arnaldo Coro Antich
Topic: 25842 Message: 25842

Dear amigo:
Your .pdf file about the ceramic resonator regenerative does not load properly . It keeps saying error !!!
Please send the file direct to
arnaldo.coro@...
where I can download it... Already found at least one 7200 kHz ceramic resonator with three pigtails that will allow to initiate tests.

73 and tnx for the help
Arnie Coro
CO2KK

25843. Re: [regenrx] New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-14 16:13:07 UTC
From: Rob
Topic: 89 Message: 25843

I can not open this PDF file either.

Please send it directly to me at:
roomberg@...

I will make sure everyone gets it.

and

Arnie... what is your mailing address?

On 02/14/2016 04:50 AM, regenrx@yahoogroups.com wrote:
>
>
> Hello,
>
> This email message is a notification to let you know that
> a file has been uploaded to the Files area of the regenrx
> group.
>
> File : /Ceramic Resonator Regen Trcvr.pdf
> Uploaded by : qrper723 <qrper723@...>
> Description : VK3YE's Regen-Trcvr "Clone"
>
> You can access this file at the URL:
>
https://groups.yahoo.com/neo/groups/regenrx/files/Ceramic%20Resonator%20Regen%20Trcvr.pdf
>
> To learn more about file sharing for your group, please visit:
> https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398
>
> Regards,
>
> qrper723 <qrper723@...>
>
>

25844. Re: [regenrx] File at YAHOO Group does not open FOUND IT pictures here

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-14 16:41:27 UTC
From: Rob
Topic: 25842 Message: 25844

I FOUND IT.. made pictures of the PDF so it would display online
without loading PDF format.
That seems to be where I break it.

http://www.learnmorsecode.com/716/JA9MAT716A01.jpg
http://www.learnmorsecode.com/716/JA9MAT716B01.jpg

On 02/14/2016 08:00 AM, 'Prof. Arnaldo Coro Antich' coro@...
[regenrx] wrote:
>
> Dear amigo:
> Your .pdf file about the ceramic resonator regenerative does not load
> properly . It keeps saying error !!!
> Please send the file direct to
> arnaldo.coro@...
> where I can download it... Already found at least one 7200 kHz ceramic
> resonator with three pigtails that will allow to initiate tests.
>
> 73 and tnx for the help
> Arnie Coro
> CO2KK
>
>

25845. Re: VK3YE's Ceramic Resonator Regen "Clone"

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-14 19:55:29 UTC
From: b_weeber@...
Topic: 25840 Message: 25845

Hello qrp.gaijin

I had a similar idea, this is my actual version:
https://groups.yahoo.com/neo/groups/regenrx/files/Exchange/80m_Resonator_Regen.gif
https://groups.yahoo.com/neo/groups/regenrx/files/Exchange/80m_Resonator_Regen.gif

I can confirm the 20 dB sideband attenuation. But i am not really satisfied, the circuit reacts too sensitive on the ratio between signalstrength and bfo amplitude. When the bfo is too strong, it overruns the regen circuit and selectivity is getting lost. What i want to try next, is a DG-MOSFet as a product detector, while keeping the bfo signal away from the regen.

Another observation: When tuning the regeneration potentiometer, a BF199 shows only 1/10th of the drift compared to a 2N3904. Until now i could not syncronize the two resonators, therefore i use two separate variable capacitors.

Best regards,
Bernd

25846. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-14 20:39:22 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 25846

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Leonard's Stuff/Mk. 7 Mod 8c Schematic.bmp
Uploaded by : leonardmeek <lemeek@...>
Description : Schematic

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Leonard%27s%20Stuff/Mk.%207%20%20Mod%208c%20Schematic.bmp

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

leonardmeek <lemeek@...>

25847. Mk.7 Mod 8c

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-14 20:45:20 UTC
From: Leonard Meek
Topic: 25847 Message: 25847

I just uploaded what U think is the final update of my Mk.7. I got rid of the 12FQ8 in favor of a more reliable cascode regen circuit. It performs pretty good, but is disappointing on SS. Now I think I'll do some mods on my Mk.8.

Leonard

25848. Re: [regenrx] Mk.7 Mod 8c

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-14 20:47:37 UTC
From: Leonard Meek
Topic: 25847 Message: 25848

Subject: [regenrx] Mk.7 Mod 8c

>I just uploaded what I think is the final update of my Mk.7. I got rid of
> the 12FQ8 in favor of a more reliable cascode regen circuit. It performs
> pretty good, but is disappointing on SS. Now I think I'll do some mods on
> my
> Mk.8.
>
> Leonard
>
>
>
>
> ------------------------------------
>
> ------------------------------------
>
> "In the interest of Regenerating radio's lost art of Regeneration"
> ------------------------------------
>
> Yahoo Groups Links
>
>
>
>

25849. Re: [regenrx] New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-15 00:30:12 UTC
From: Rob
Topic: 89 Message: 25849

Just wrapping some brain cells around circuit design here......

Is there any reason varactors were used instead of variable capacitors
in this radio ?

On 02/14/2016 03:39 PM, regenrx@yahoogroups.com wrote:
>
>
> Hello,
>
> This email message is a notification to let you know that
> a file has been uploaded to the Files area of the regenrx
> group.
>
> File : /Leonard's Stuff/Mk. 7 Mod 8c Schematic.bmp
> Uploaded by : leonardmeek <lemeek@...>
> Description : Schematic
>
> You can access this file at the URL:
> https://groups.yahoo.com/neo/groups/regenrx/files/Leonard%27s%20Stuff/Mk.%207%20%20Mod%208c%20Schematic.bmp
>
> To learn more about file sharing for your group, please visit:
> https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398
>
> Regards,
>
> leonardmeek <lemeek@...>
>
>

25850. Re: [regenrx] New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-15 01:11:41 UTC
From: Leonard Meek
Topic: 89 Message: 25850

There was a couple of reasons that varactors were used in my Mk;7 (and others) I normally use varactors for band spread because I can tune multiple circuits with one panel control, and the control can be mounted anywhere on the panel. In this case, the 2 section varicap I had was only 60pF so I used it for band spread and used MVAM109's for band set. Lastly, I had a bunch of MVAM109's that needed a job. BTW, I noticed some errors and ommissions after I posted the schematic, so I'll be correcting them shortly.

Leonard
----- Original Message -----
From: Rob roomberg@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Sunday, February 14, 2016 2:30 PM
Subject: Re: [regenrx] New file uploaded to regenrx

Just wrapping some brain cells around circuit design here......

Is there any reason varactors were used instead of variable capacitors in this radio ?

On 02/14/2016 03:39 PM, regenrx@yahoogroups.com wrote:

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Leonard's Stuff/Mk. 7 Mod 8c Schematic.bmp
Uploaded by : leonardmeek <lemeek@hawaiiantel.net>
Description : Schematic

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Leonard%27s%20Stuff/Mk.%207%20%20Mod%208c%20Schematic.bmp

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

leonardmeek <lemeek@...>

25851. Re: [regenrx] New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-15 02:08:28 UTC
From: Rob
Topic: 89 Message: 25851

Cool.
Thanks for the explanations.
I have a bunch of 1SV149 varicaps here but did not put to use yet.
I was working on understanding basic RF regen tube circuits before
moving into newfangled sand state devices.

On 02/14/2016 08:11 PM, 'Leonard Meek' lemeek@... [regenrx]
wrote:
>
> □
>
> There was a couple of reasons that varactors were used in my Mk;7 (and
> others) I normally use varactors for band spread because I can tune
> multiple circuits with one panel control, and the control can be
> mounted anywhere on the panel. In this case, the 2 section varicap I
> had was only 60pF so I used it for band spread and used MVAM109's for
> band set. Lastly, I had a bunch of MVAM109's that needed a job. BTW, I
> noticed some errors and ommissions after I posted the schematic, so
> I'll be correcting them shortly.
> Leonard
>
> ----- Original Message -----
> *From:* Rob roomberg@... [regenrx]
> <mailto:roomberg@...%20[regenrx]>
> *To:* regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>
> *Sent:* Sunday, February 14, 2016 2:30 PM
> *Subject:* Re: [regenrx] New file uploaded to regenrx
>
> Just wrapping some brain cells around circuit design here.....
>
> Is there any reason varactors were used instead of variable
> capacitors in this radio ?
>
>
>
>
>
> On 02/14/2016 03:39 PM, regenrx@yahoogroups.com wrote:
>>
>>
>> Hello,
>>
>> This email message is a notification to let you know that
>> a file has been uploaded to the Files area of the regenrx
>> group.

>>
>> File : /Leonard's Stuff/Mk. 7 Mod 8c Schematic.bmp
>> Uploaded by : leonardmeek <lemeek@...>
>> Description : Schematic
>>
>> You can access this file at the URL:
>> https://groups.yahoo.com/neo/groups/regenrx/files/Leonard%27s%20Stuff/Mk.%207%20%20Mod%208c%20Schematic.bmp
>>
>> To learn more about file sharing for your group, please visit:
>> https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398
>>
>> Regards,
>>
>> leonardmeek <lemeek@...>
>>
>
>

25852. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-15 04:40:10 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 25852

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Leonard's Stuff/Mk. 7 Mod 8c Schematic.bmp
Uploaded by : leonardmeek <lemeek@...>
Description : Corrected Schematic

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Leonard%27s%20Stuff/Mk.%207%20%20Mod%208c%20Schematic.bmp

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

leonardmeek <lemeek@...>

25853. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-15 12:18:19 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 25853

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Ceramic Resonator Regen Trcvr.pdf
Uploaded by : qrper723 <qrper723@...>
Description : VK3YE's Ceramic Resonator Regen Trcvr "CLONE"

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Ceramic%20Resonator%20Regen%20Trcvr.pdf

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

qrper723 <qrper723@...>

25854. VK3YE's Ceramic Resonator Regen Trcvr "CLONE"

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-15 12:30:50 UTC
From: qrper723@...
Topic: 25854 Message: 25854

I put the revised schematic into file folder. The TX is about 400mW into the dummy load and has a QRH around 100Hz while keying. The characteristic tone I like. And I misunderstood about the "single signal" thanks for suggestions.

ja9mat.

25855. Re: a first regenerative radio power supply and the rest of the circuits advice reply from Arnie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-15 17:41:21 UTC
From: Prof. Arnaldo Coro Antich
Topic: 25855 Message: 25855

Hola amigo Raj
Then when you finish your regenerative receiver in its very first
version, you can calibrate the dial to tune to 6000 kiloHertz, the
frequency that we use every evening to broadcast in English
to the USA.
The separate chassis is only for the power supply, because once built
and fitted with the proper connectors or screws type terminals
you can use it for many projects...
The main radio itself goes into one single chassis, but I have built
some on a piece of good quality printed circuit board using the
insulated islands cut from PC board and glued to the main board
that serves as a perfect ground plane connecting area.
My advice , after you have fully tested the power supply is to
follow by building the audio module, and then test it ... If you
do not have an audio oscillator, then just touch with your finger
the top of the audio level control potentiometer with the loudspeaker
connected of course... BIG HUM will be heard !!!
Ideally I test the audio module with my nice variable frequency
audio oscillator ... starting with a 1000 Hertz tone, at a nice low
level, and then sweeping from 100 Hertz up to 5000 Hertz...
I also try to detect any background hum... that will be almost
nonexisting if the power supply is working OK

Next step is to build the regenerative detector stage... with a
simple LC tuned circuit ... You will want to make a coil for
the range from about 5 or 6 megaHertz up to about 10 megaHertz...
Using the commonly available air spaced variable capacitors
a coil with about 15 turns close wound , with the cathode tap
around turn 3 or 4 , will work quite well with a 250 to 350 Picofarads
maximum variable capacitor.... At night , even with just a short
length of wire connected to the two turns antenna link, many signals
will be heard... and the six megaHertz international broadcast band
can be easily found... If you have an RF signal generator, then
calibration of the dial is very easy...
You will be surprised how smoothly the regenerative detector approaches
the critical oscillation point... When it is very near
that point if shows the maximum sensitivity...

On 15/02/16 12:22, Rajaram Bhat wrote:
> Dear Prof. Coro:
>
> I am in USA - in the north-western part of New York state. Thank you
> for sending the transcript of your DXers Unlimited radio program.
>

> I will build the power supply on a separate chassis. Should I build
> the amplifier and detector on separate chassis too? I assume that the
> RF amplifier and dual tuned band pass filters will be built on the
> same chassis as the detector. In choosing a chassis I need to know if
> it is better to haver the amplifier, detector, RF amp and band pass
> filters on the same chassis. For now I will concentrate on building
> the power supply and testing it.
>
> Regards,
>
> Raj
>
>
>> On Feb 14, 2016, at 11:23 PM, Prof. Arnaldo Coro Antich <coro@...
>> <mailto:coro@...>> wrote:
>>
>> Dear amigo : Where in the world are you located ?
>> Nothing to thank me .... I believe that providing fellow radio
>> hobby experimenters with information on how to improve
>> their home built sets is a very good way of helping people
>> to enjoy the hobby. My Dxers Unlimited radio broadcast program
>> has done that for the past 25 years with great success !!!
>> I am attaching the script of one of my shows for you to
>> be able to read it...
>> Remember... build and fully test the power supplies first, and
>> it is a good idea to build them on a separate chassis if you want
>> to do more experiments in the future, and also even with
>> a permanent radio the distance from the power transformer
>> and power supply filter choke is a good idea to avoid picking
>> up hum
>> One of the problems with regenerative detectors is precisely
>> background HUM !!!!
>> 73 and DX
>> Arnie
>> CO2KK
>>
>>
>> On 14/02/16 23:10, Rajaram Bhat wrote:
>>> Dear Prof. Coro:
>>>
>>> Thank you for the feedback and suggestions, particularly for future
>>> experiments. It will take me some time (much more than for drawing
>>> the circuit diagrams!). I will try to get a high inductance audio
>>> choke. I have the 1 mH RF choke.
>>>
>>> Regards,
>>>
>>> Raj
>>>
>>>> On Feb 14, 2016, at 10:40 PM, Prof. Arnaldo Coro Antich

>>>> <coro@... <mailto:coro@...>> wrote:
>>>>
>>>> Perfect .pdf files amigo Raj !!!
>>>> I use a 1 milliHenry RF choke in series with the plate of the 6AK5
>>>> regenerative detector... and also you can recover much more audio
>>>> by inserting a high inductance audio choke in series with the 1
>>>> milliHenry RF choke... The ¨ ideal audio choke ¨ is in the range
>>>> from 100 to 300 Henry !!! The BC221 heterodyne frequency meter
>>>> uses a 300 Henry choke that is wound with a very thin diameter
>>>> wire so one must protect it from high currents that may be caused
>>>> by an accidental short circuit.
>>>> After you experiment with this version of the regenerative , may
>>>> I suggest that you add a RF stage ... ahead of the detector...
>>>> Begin your experiment with an UNTUNED triode stage....
>>>> Then continue your experimentation by including a dual tuned
>>>> critically coupled tuneable bandpass input filter ahead of the
>>>> RF amplifier stage. You MUST provide a way of manually controlling
>>>> the gain of the RF stage...because you only need to compensate
>>>> for the loss of the dual tuned bandpass input filter...
>>>> Please remember to build the REGENERATIVE DETECTOR STAGE
>>>> following the recommendations for vacuum tube's VFO's.... Rock
>>>> solid mechanical stability is essential .
>>>> GOOGLE for ZL2JJ Regenerative Receiver to gain know how about
>>>> the mechanical construction ideas applied in that excellent
>>>> design...
>>>> After finishing experimenting with the regenerative receiver may
>>>> I suggest that you try using it as the ¨tail end¨ of a REGENERODYNE...
>>>>
>>>> 73 and DX
>>>> Arnie Coro
>>>> CO2KK
>>>>
>>>>
>>>> On 14/02/16 22:16, Rajaram Bhat wrote:
>>>>> Dear Prof. Coro:
>>>>>
>>>>> Thank you for the quick reply and additional info. Sorry for the
>>>>> small size. I did not realize it, since it shows as a big diagram
>>>>> on my computer. I am sending the circuits in as pdf file. All
>>>>> the circuits have been combined into this file. I hope you can
>>>>> read them. Please let me know.
>>>>>
>>>>> Regards,
>>>>>
>>>>> Raj
>>>>>
>>>>>
>>>>>
>>>>>
>>>>>

>>>>>
>>>>>> On Feb 14, 2016, at 9:48 PM, Prof. Arnaldo Coro Antich
>>>>>> <coro@...> wrote:
>>>>>>
>>>>>> Dear amigo :
>>>>>> The circuit diagrams can not be seen... They are in a very small
>>>>>> size making them impossible to see.
>>>>>> The plate load that you can use is determined experimentally
>>>>>> and if possible have an RF choke installed to the plate followed
>>>>>> by the load resistor that goes to the regulated plus 36 to 48 volts.
>>>>>> If you can obtain a wirewound multiturn potentiometer to regulate
>>>>>> the screen grid voltage... of course that this would be a much
>>>>>> better option. The trick I use is to install two potentiometers
>>>>>> in series
>>>>>> one ¨coarse regeneration¨ , the other ¨fine regeneration ¨.
>>>>>> The regulated DC for the filaments is important when you are using
>>>>>> an AC power supply , but is not required if you provide power to the
>>>>>> radio from batteries... Three series connected 12 volts 7 amp hours
>>>>>> computer back up batteries when fully charged will last for many
>>>>>> hours
>>>>>> of use... But it is a better and more economical option to use
>>>>>> the AC power
>>>>>> supply in which case you will like to have DC on the filaments of the
>>>>>> regenerative detector and if possible to the filaments of the audio
>>>>>> preamplifier tube too.
>>>>>> Plug in coils are ideal for an experimenters radio receiver,
>>>>>> because you
>>>>>> will not need to wire a complicated switching arrangement !!!
>>>>>> I make my coils using polyethylene cylinders that come from the
>>>>>> center
>>>>>> of RG17 coaxial cable... you can live the wire in the middle , as
>>>>>> it will
>>>>>> not affect the inductance of your coil at all... As a matter of
>>>>>> fact, if you
>>>>>> leave a section of that center wire at one end, it can be used to
>>>>>> keep
>>>>>> the coil in place inside the octal tube base coming from a bad tube
>>>>>> that is what provides the plug in possibility .... but never
>>>>>> break a good
>>>>>> tube to use the bakelite base section !!!
>>>>>> There is NO difference between 6.0 and 6.3 volts for the filaments...
>>>>>> so use whatever you have at hand... My 6.0 volts regulated supply
>>>>>> uses a 7805 with a 1N4007 in series with the ground lead, so my
>>>>>> actual regulated DC voltage is 5.7 volts ... that seems to work quite
>>>>>> well, but for an older tube, you can add a second 1N4007 and apply
>>>>>> about 6.4 volts to the filaments , and that makes no difference from
>>>>>> 6.3 volts.
>>>>>> Please send the circuit diagrams in big size format. I can read
>>>>>> different
>>>>>> file formats like png, gif and jpeg or jpg

>>>>>>
>>>>>> 73 and DX
>>>>>> Arnie
>>>>>> CO2KK
>>>>>>
>>>>>>
>>>>>> On 14/02/16 17:44, Rajaram Bhat wrote:
>>>>>>> Dear Prof. Coro:
>>>>>>>
>>>>>>> I have finished drawing the circuit diagrams for the power
>>>>>>> supply, audio amp and detector. The detector section, I am
>>>>>>> quite unsure of since you had recommended maintaining a plate
>>>>>>> and screen voltage of 40 V (with the screen voltage varying
>>>>>>> between 0 and 40 V). This limits the load resistor in the
>>>>>>> plate. I have not given any details of the coil. I will likely
>>>>>>> make several plug-in coils. The variable capacitors are air
>>>>>>> dielectric with a vernier drive. Should the potentiometer for
>>>>>>> the screen voltage control be a multi-turn (I can get a 10 turn
>>>>>>> wire wound precision pot) pot?
>>>>>>>
>>>>>>> I have come up with two options for the DC filament supply for
>>>>>>> the detector. One way using a zener diode gives a 6 VDC supply
>>>>>>> instead of 6.3 V. The other way using a LM317 gives 6.3VDC. I
>>>>>>> am not sure if there is sufficient voltage difference between
>>>>>>> input and output for the LM317 to operate.
>>>>>>>
>>>>>>> Would 6BR7 be better than 6AK5 for the detector?
>>>>>>>
>>>>>>> I look forward to your comments, suggestions and corrections.
>>>>>>> Thank you.
>>>>>>>
>>>>>>> Regards,
>>>>>>>
>>>>>>> Raj
>>>>>>> <Mail Attachment.jpeg>
>>>>>>>
>>>>>>>
>>>>>>> <Mail Attachment.jpeg>
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>>>>>>>
>>>>>>> <Mail Attachment.jpeg>
>>>>>>>
>>>>>>>
>>>>>>>
>>>>>>>
>>>>>>>>> On Feb 11, 2016, at 3:53 PM, Prof. Arnaldo Coro Antich
>>>>>>>>> <coro@...> wrote:
>>>>>>>>>
>>>>>>>>> OK , draw the circuit diagram very carefully on a large piece

>>>>>>>> of cardboard , then take a photo and send me the .jpg file
>>>>>>>> to see it...
>>>>>>>> Remember that the primary transformer voltage in your country
>>>>>>>> may be 220 volts (here it is 120 volts) so it must be handled
>>>>>>>> with care.... The rectified direct current output of 140 to 160
>>>>>>>> volts
>>>>>>>> is also to be handled with extra care and you must discharge the
>>>>>>>> filter electrolytic capacitors before working on the supply. Use
>>>>>>>> a 1000 ohms two watts resistor to short the capacitors to ground,
>>>>>>>> do not short them to ground with a direct wire connection ...
>>>>>>>> best regards
>>>>>>>> Arnie
>>>>>>>>
>>>>>>>> On 11/02/16 15:43, Rajaram Bhat wrote:
>>>>>>>>> Dear Prof. Coro:
>>>>>>>>>
>>>>>>>>> Thank you for the info. I will gather parts for the power
>>>>>>>>> supply and construct it first and then get back to you if I
>>>>>>>>> need any more info regarding the rest of the radio.
>>>>>>>>>
>>>>>>>>> Regards,
>>>>>>>>>
>>>>>>>>> Raj
>>>>>>>>>
>>>>>>>>>> On Feb 11, 2016, at 1:13 PM, Prof. Arnaldo Coro Antich
>>>>>>>>>> <coro@...> wrote:
>>>>>>>>>>
>>>>>>>>>> Hola amigo !
>>>>>>>>>> For the ¨high voltage¨ 140 to 160 volts direct current power
>>>>>>>>>> supply
>>>>>>>>>> I prefer to use a power transformer wound to include a Faraday
>>>>>>>>>> screen between the primary and secondary windings , and capable
>>>>>>>>>> to provide around 150 milliamps of current, so that it will be
>>>>>>>>>> capable to meet the CCS Commercial Continuos Service operating
>>>>>>>>>> conditions. The same transformer is wound to have a secondary
>>>>>>>>>> winding for the tube's filaments capable of providing 6.3 volts
>>>>>>>>>> and 12.6 volts at 3 amperes....
>>>>>>>>>> I use here a Russian TV power transformer type TB180 that has
>>>>>>>>>> several windings that meet the needs very well.
>>>>>>>>>> The silicon rectifiers for the high voltage are 1N4007 with .01
>>>>>>>>>> disc ceramic 500 volts capacitors in parallel...
>>>>>>>>>> The filter capacitors are 220 microfarads at 350 volts D.C
>>>>>>>>>> and preferred to be of the low ESR type. I also use a 10 henry
>>>>>>>>>> 200 milliamperes filter choke for the PI type filter.
>>>>>>>>>> From the plus 140 to 160 volts supply a gas discharge voltage
>>>>>>>>>> regulator tube that provides 75 volts is fed and this voltage
>>>>>>>>>> is taken to a resistor network with a variable element to apply
>>>>>>>>>> the plate voltage and screen voltage for the detector (
>>>>>>>>>> assuming you are using a pentode tube detector. You can also
>>>>>>>>>> use a regulator built around a Zener diode and a power transistor

>>>>>>>>>> or you can use an integrated circuit voltage regular type LM317
>>>>>>>>>> or similar to provide a variable voltage from1.5 to 35 volts to
>>>>>>>>>> feed the regenerative detector tube plate and screen circuits.
>>>>>>>>>> The power supply is built on a heavy metal chassis... preferred,
>>>>>>>>>> or you can wire it on a piece of plywood and tie the different
>>>>>>>>>> elements to it... Treat the high voltage with proper care and use
>>>>>>>>>> a 250 milliamps fuse in series with output of the high voltage
>>>>>>>>>> and a 1 ampere fuse for the power line....
>>>>>>>>>> 73 and DX
>>>>>>>>>> Arnie
>>>>>>>>>>
>>>>>>>>>> On 11/02/16 11:58, Rajaram Bhat wrote:
>>>>>>>>>>> Dear Prof. Coro:
>>>>>>>>>>>
>>>>>>>>>>> I have the tubes you have mentioned and I can get others if
>>>>>>>>>>> needed. To build the power supply with 140 V for the audio
>>>>>>>>>>> tube(s) and a regulated 36 V for the detector does on need a
>>>>>>>>>>> transformer with appropriate taps or does one obtain it from
>>>>>>>>>>> the same tap with voltage dropping resistors? Do you use
>>>>>>>>>>> transistors or ICs for the voltage regulators (both for 36 V
>>>>>>>>>>> and 6.3 V)?
>>>>>>>>>>>
>>>>>>>>>>> Thank you again for your help.
>>>>>>>>>>>
>>>>>>>>>>> Regards,
>>>>>>>>>>>
>>>>>>>>>>> Raj
>>>>>>>>>>>
>>>>>>>>>>>
>>>>>>>>>>>> On Feb 11, 2016, at 11:43 AM, Prof. Arnaldo Coro Antich
>>>>>>>>>>>> <coro@...> wrote:
>>>>>>>>>>>>
>>>>>>>>>>>> Dear amigo Raj:
>>>>>>>>>>>> As always glad to help fellow radio hobby enthusiasts to enjoy
>>>>>>>>>>>> building nice radios.
>>>>>>>>>>>> I wonder what types of vacuum tubes do you have available.
>>>>>>>>>>>> I prefer miniature 7 pins and 9 pins tubes that are very rugged
>>>>>>>>>>>> and easy to use, although the old 8 pins octal type tubes when
>>>>>>>>>>>> found in good condition are also useful. For example, the
>>>>>>>>>>>> 6SK7, 6SJ7
>>>>>>>>>>>> 6J5 and 6V6 octal tubes are excellent choices... and they
>>>>>>>>>>>> will last
>>>>>>>>>>>> two lifetimes when fed with voltages not exceeding 150 volts.
>>>>>>>>>>>> The 7 pins miniature 6AK5/5654 and the Russian equivalent
>>>>>>>>>>>> 6ZHE1P
>>>>>>>>>>>> are ideal for the RF amplifier stage ahead of the detector and
>>>>>>>>>>>> for the regenerative detector itself... I divide the
>>>>>>>>>>>> building process
>>>>>>>>>>>> in three parts.... RF module, audio module and power supply
>>>>>>>>>>>> unit.

>>>>>>>>>>>> As a matter of fact I build a universal external power
>>>>>>>>>>>> supply unit
>>>>>>>>>>>> that powers all my vacuum tubes experimental radios...
>>>>>>>>>>>> And when we build a new radio for a beginner, I strongly
>>>>>>>>>>>> recommend
>>>>>>>>>>>> the two chassis approach... to keep the power supply away
>>>>>>>>>>>> from the
>>>>>>>>>>>> receiver itself...
>>>>>>>>>>>> The audio module for a very nice radio with good loudspeaker
>>>>>>>>>>>> output built around a triode and a pentode is my choice for
>>>>>>>>>>>> a general purpose radio that can be provided with plug in coils
>>>>>>>>>>>> covering from the AM broadcast band all the way up to the
>>>>>>>>>>>> 12 megaHertz or 25 meters international broadcast band.
>>>>>>>>>>>>
>>>>>>>>>>>> Just ask any questions and I will try to answer them...
>>>>>>>>>>>>
>>>>>>>>>>>> yours truly
>>>>>>>>>>>> Arnie Coro
>>>>>>>>>>>> CO2KK
>>>>>>>>>>>>
>>>>>>>>>>>> On 11/02/16 11:32, Rajaram Bhat wrote:
>>>>>>>>>>>>> Dear Prof. Coro:
>>>>>>>>>>>>>
>>>>>>>>>>>>> I am taking you up on your offer to provide detailed
>>>>>>>>>>>>> advice on building my own vacuum tube regenerative radio.
>>>>>>>>>>>>> I have built both regenerative and superhet radios
>>>>>>>>>>>>> (vacuum tube and transistor) for the AM (MW) band -
>>>>>>>>>>>>> essentially following the circuits designed by others.
>>>>>>>>>>>>> The vacuum tube radios I built have used battery tubes,
>>>>>>>>>>>>> both miniature and subminiature tubes. I have also built
>>>>>>>>>>>>> recently a solid state region for SW. However, I am not
>>>>>>>>>>>>> happy with the results of this SW regen (although it
>>>>>>>>>>>>> receives broadcasts from Havana, Cuba quite well!). If
>>>>>>>>>>>>> you can provide advice on building a vacuum tube regen for
>>>>>>>>>>>>> SW that works well, I would greatly appreciate it. I am
>>>>>>>>>>>>> not a radio ham but enjoy building and listening. It
>>>>>>>>>>>>> would be great if I could listen to SSB transmissions.
>>>>>>>>>>>>>
>>>>>>>>>>>>> Regards,
>>>>>>>>>>>>>
>>>>>>>>>>>>> Raj
>>>>>>>>>>>>>
>>>>>>>>>>>>>
>>>>>>>>>>>>>> Begin forwarded message:
>>>>>>>>>>>>>>
>>>>>>>>>>>>>> *From: *"'Prof. Arnaldo Coro Antich' coro@...
>>>>>>>>>>>>>> [regenrx]" <regenrx@yahoogroups.com>
>>>>>>>>>>>>>> *Subject: **[regenrx] Re: [Glowbugs] BC-221 Homage and
>>>>>>>>>>>>>> how to use the capacitor and dial for a first
>>>>>>>>>>>>>> regenerative radio*

>>>>>>>>>>>>>> *Date: *February 11, 2016 at 10:09:07 AM EST
>>>>>>>>>>>>>> *To: *Ejparagi@..., tetrode@...,
>>>>>>>>>>>>>> regenrx@yahoogroups.com
>>>>>>>>>>>>>> *Reply-To: *regenrx@yahoogroups.com
>>>>>>>>>>>>>>
>>>>>>>>>>>>>> Hola amigo !
>>>>>>>>>>>>>> Sure... great idea... and easy to put in practice...
>>>>>>>>>>>>>> My projects now are aiming at helping the young and not
>>>>>>>>>>>>>> so young
>>>>>>>>>>>>>> newcomers to amateur radio here in Cuba be able to start
>>>>>>>>>>>>>> listening
>>>>>>>>>>>>>> to 40 meters ...
>>>>>>>>>>>>>> Why 40 meters ? Because due to the daytime propagation
>>>>>>>>>>>>>> characteristics it covers our whole archipelago with very
>>>>>>>>>>>>>> good
>>>>>>>>>>>>>> signals .... and at night you can pick up Dx stations too.
>>>>>>>>>>>>>> The radios must be ¨barebones¨ because electronic components
>>>>>>>>>>>>>> are not sold at any stores... so we must recycle parts from
>>>>>>>>>>>>>> equipment retired from service because of old age, breakdowns
>>>>>>>>>>>>>> and even struck by lightning !!! Yes, I have desoldered parts
>>>>>>>>>>>>>> that were part of a radio struck by a nearby lightning...
>>>>>>>>>>>>>> not a direct
>>>>>>>>>>>>>> hit of course, but it left the radio dead for all
>>>>>>>>>>>>>> practical purposes
>>>>>>>>>>>>>> because of the many IC's that were damaged !!!
>>>>>>>>>>>>>> A regenerodyne is the proper phase two of anyone wanting to
>>>>>>>>>>>>>> build her or his own receiver... I always start with a
>>>>>>>>>>>>>> regenerative
>>>>>>>>>>>>>> that picks up signals on the AM broadcast band, so that
>>>>>>>>>>>>>> the builder
>>>>>>>>>>>>>> will be attracted further by the fact that the radio
>>>>>>>>>>>>>> built does
>>>>>>>>>>>>>> ¨work¨ and audio comes out of a loudspeaker...
>>>>>>>>>>>>>> YES, a loudspeaker , better than headphones, because if makes
>>>>>>>>>>>>>> the project more attractive.
>>>>>>>>>>>>>> My vacuum tubes circuits designs are tried and tested, and I
>>>>>>>>>>>>>> include for every part a span of values that can be used
>>>>>>>>>>>>>> and the
>>>>>>>>>>>>>> radio will still work...
>>>>>>>>>>>>>> For example the RC resistor capacitor circuit at the grid
>>>>>>>>>>>>>> of the
>>>>>>>>>>>>>> regenerative detector will tolerate large deviations in
>>>>>>>>>>>>>> values
>>>>>>>>>>>>>> from the optimum ones.... My preference for general reception
>>>>>>>>>>>>>> is to go for a small value capacitor , less than 100
>>>>>>>>>>>>>> picofarads
>>>>>>>>>>>>>> and a resistor at least 1 megaOhm... but the radio will work
>>>>>>>>>>>>>> with 50 pF and 2,2 megaOHm etc etc...
>>>>>>>>>>>>>> The favorite regenerative detector is the Hartley....
>>>>>>>>>>>>>> with a pentode

>>>>>>>>>>>>>> using screen grid control of the regeneration...
>>>>>>>>>>>>>> If you need any advice to start building your own
>>>>>>>>>>>>>> regenerative
>>>>>>>>>>>>>> receiver, just send an email amigo...
>>>>>>>>>>>>>> No doubt that vacuum tubes regenerative are mucho , mucho
>>>>>>>>>>>>>> more
>>>>>>>>>>>>>> better than solid state versions !!!!
>>>>>>>>>>>>>> Some of my regenerative detectors have started to receive
>>>>>>>>>>>>>> with less than 12 volts applied to the plate of the
>>>>>>>>>>>>>> pentode...
>>>>>>>>>>>>>> but running around 24 to 50 volts or so is better...
>>>>>>>>>>>>>> I divide the project into several ¨modules¨ ... and build
>>>>>>>>>>>>>> them
>>>>>>>>>>>>>> individually, then test them, and then do like at the
>>>>>>>>>>>>>> aircraft
>>>>>>>>>>>>>> factories... integrate the modules into the receiver....
>>>>>>>>>>>>>> The typical regenerative with a Hartley detector uses
>>>>>>>>>>>>>> one 6AK5/5654 or Soviet 6ZHE1P pentode , and an audio
>>>>>>>>>>>>>> module built using a triode/pentode that comes in a single
>>>>>>>>>>>>>> glass envelope... The power supply module has three outputs
>>>>>>>>>>>>>> 6.3 volts AC, 6.0 volts regulated DC for the regenerative
>>>>>>>>>>>>>> detector tube filaments, and the B plus that provides 140
>>>>>>>>>>>>>> volts DC for the audio tubes, and 36 volts regulated for the
>>>>>>>>>>>>>> detector plate and screen....
>>>>>>>>>>>>>> Winding the coils for the detector is a lot of fun...
>>>>>>>>>>>>>> especially
>>>>>>>>>>>>>> because you must optimize the cathode tap on the coil...
>>>>>>>>>>>>>> in general to start testing , wind 20 turns of enamel wire
>>>>>>>>>>>>>> about no. 18 or no.20 on a 25 mm diameter plastic white
>>>>>>>>>>>>>> PVC tube... the antenna link is separated from the main coil
>>>>>>>>>>>>>> by about 5 millimeters (this is for the first test,
>>>>>>>>>>>>>> because later
>>>>>>>>>>>>>> you will want to build a variocoupler to bring the signal
>>>>>>>>>>>>>> from
>>>>>>>>>>>>>> the antenna into the grid tuned circuit...
>>>>>>>>>>>>>> The great attraction of this project is that it will
>>>>>>>>>>>>>> practically
>>>>>>>>>>>>>> always ¨work¨ and there are very few chances of spoiling
>>>>>>>>>>>>>> parts (like what happens with solid state components
>>>>>>>>>>>>>> irreversibly damaged by just a little mistake)
>>>>>>>>>>>>>> Start by studying the circuit , then gather the parts, and
>>>>>>>>>>>>>> begin by assembling the power supply... testing it, and then
>>>>>>>>>>>>>> proceed with the audio amplifier module...
>>>>>>>>>>>>>> The RF module is the last to be built !!!
>>>>>>>>>>>>>> 73 and DX
>>>>>>>>>>>>>> Arnie Coro
>>>>>>>>>>>>>> CO2KK
>>>>>>>>>>>>>>
>>>>>>>>>>>>>
>>>>>>>>>>>>

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>>
>> <Dxers Unlimited midweek edition Tuesday 9 February 2016.rtf>
>

25856. Re: [regenrx] VK3YE's Ceramic Resonator Regen Trcvr "CLONE" JPG

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-15 18:40:55 UTC
From: Rob
Topic: 25854 Message: 25856

Very nice. Thankyou.
I posted a JPG of it here:

http://www.learnmorsecode.com/716/index.html
http://www.learnmorsecode.com/716/JA9MAT716C.jpg

On 02/15/2016 07:30 AM, qrper723@... [regenrx] wrote:
>
> I put the revised schematic into file folder. The TX is about 400mW
> into the dummy load and has a QRH around 100Hz while keying. The
> characteristic tone I like. And I misunderstood about the "single
> signal" thanks for suggestions.
>
> ja9mat.
>
>

25859. Re: VK3YE's Ceramic Resonator Regen "Clone"

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-17 20:32:28 UTC
From: b_weeber@...
Topic: 25840 Message: 25859

Hello,

this video demonstrates the amount of attenuation, when using a bfo. The circuit is just that one above. I'm tuning a signal generater a few khz up and down. Turn your loudness up, otherwise it is hard, to hear the other side.

http://www.b-weeber.de/bilder/regenrx/resonator_regen_&_bfo.mp4
http://www.b-weeber.de/bilder/regenrx/resonator_regen_&_bfo.mp4

Best regards,
Bernd

25860. "When Not to Bloop"

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-17 21:32:17 UTC
From: Hubert Miller
Topic: 25860 Message: 25860

"When Not to Bloop

To keep amateur radio from getting a black eye, we suggest that you not try to copy the signals of planes attempting transoceanic flights with a radiating blooper unless you live at least 100 miles or more from any population center or department of commerce or airways station. An r.f. stage ahead of the 'blooper' regenerative detector will cut down the radiation from the receiver, but will not entirely eliminate it, and the receiver may still cause interference to receivers a few blocks away when receiving weak signals.
the c.w. signals of a plane on a recent trans-Atlantic flight were obliterated during part of the flight by several radiating receivers. It was
not possible to copy the signals when they dropped below R6 because of the many 'birdies' on the frequency.
An Associated Press dispatch stated that 'amateur radio men were trying to pick up Merrill's plane, making it increasingly difficult for the air line to receive the plane's signals.
That sort of thing does amateur radio no good."

from RADIO, Jun 1937, 23.
Not posted here to stir up controversy again, but to maybe show concerns at the time, and what "could" happen with regen receivers,
long antennas, and good propagation - - maybe!
via: Hue Miller

25861. Re: [regenrx] Re: VK3YE's Ceramic Resonator Regen "Clone"

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-17 22:43:43 UTC
From: Michael
Topic: 25840 Message: 25861

No sound audible, Bernd. Or is it my system???

Michael

On 17.02.16 20:32, b_weeber@... [regenrx] wrote:

> this video demonstrates the amount of attenuation, when using a bfo. The
> circuit is just that one above. I'm tuning a signal generater a few khz
> up and down. Turn your loudness up, otherwise it is hard, to hear the
> other side.
>
> http://www.b-weeber.de/bilder/regenrx/resonator_regen_&_bfo.mp4
>
> Best regards,
> Bernd

25862. Re: VK3YE's Ceramic Resonator Regen "Clone"

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-18 00:16:16 UTC
From: b_weeber@...
Topic: 25840 Message: 25862

A codec missing? On my computer it runs embedded in Firefox and with each player. To reduce size i used "Video H.264 + MP3 (MP4)", seems nothing special. The original size was about 33 MByte!

25863. Re: VK3YE's Ceramic Resonator Regen "Clone"

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-18 00:43:03 UTC
From: b_weeber@...
Topic: 25840 Message: 25863

Be aware, size is > 30 MByte!
http://www.b-weeber.de/bilder/regenrx/resonator_regen_&_bfo.avi
http://www.b-weeber.de/bilder/regenrx/resonator_regen_&_bfo.mp4

25864. Re: VK3YE's Ceramic Resonator Regen "Clone"

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-18 03:20:14 UTC
From: qrp.gaijin@...
Topic: 25840 Message: 25864

Hi Bernd,

Very nice demonstration of single-signal reception by achieving single-signal regenerative selectivity directly at the radio frequency.

Judging by ear, the opposite-sideband suppression you achieved with your ceramic resonator circuit (at 3.5 MHz?) sounds better than what I remember achieving with an LC circuit at 7 MHz.

As you hinted at in an earlier post, one problem is tracking the Q-multiplier tuning and the BFO tuning. Without such tracking, I wonder how usable such a scheme is in actual practice -- you have to adjust at least 3 controls to tune in any one signal (BFO tuning, Q-multiplier tuning, and Q-multiplier regeneration level).

Best regards,
qrp.gaijin@yahoo.com
http://qrp-gaijin.blogspot.com http://qrp-gaijin.blogspot.com

---In regenrx@yahoogroups.com, <b_weeber@...> wrote :

Be aware, size is > 30 MByte!
http://www.b-weeber.de/bilder/regenrx/resonator_regen_&_bfo.avi
http://www.b-weeber.de/bilder/regenrx/resonator_regen_&_bfo.mp4

25865. Re: RAL-7

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-18 12:15:23 UTC
From: weak_signals@...
Topic: 1306 Message: 25865

I'm looking for a RAK/RAL/RBL/RA either LF, or HF Thanks

25866. Re: "When Not to Bloop"

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-18 16:51:54 UTC
From: Paul Ross
Topic: 25866 Message: 25866

There was a concern during WW2 about radiation from the LO in superhets as well as regenerative receivers. Stories could be apocryphal.

I do remember my father mentioning the issue of regenerative receiver radiation in the early days of radio -- late 20s, early 30s -- causing interference on the MW bands.

I would think a buffer amplifier on the input would tend to help that issue, as well as stabilize the detector against antenna "pulling" issues.

73 /paul W3FIS

25867. Re: [regenrx] Re: "When Not to Bloop"

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-18 22:17:25 UTC
From: John
Topic: 25866 Message: 25867

There was an old joke -- a Locomotive Radio -- it whistles at every station!

Sent from my iPhone

> On Feb 18, 2016, at 11:51 AM, Paul Ross deadgoose@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
> There was a concern during WW2 about radiation from the LO in superhets
> as well as regenerative receivers. Stories could be apocryphal.
>
> I do remember my father mentioning the issue of regenerative receiver
> radiation in the early days of radio -- late 20s, early 30s -- causing
> interference on the MW bands.
>
> I would think a buffer amplifier on the input would tend to help that
> issue, as well as stabilize the detector against antenna "pulling" issues.
>
> 73 /paul W3FIS
>

25868. Re: [regenrx] Re: "When Not to Bloop"

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-19 07:43:45 UTC
From: robert rode
Topic: 25866 Message: 25868

...Many re-gens were found by a guy with a Mauser...

On Thursday, February 18, 2016 4:17 PM, "John jr6v6gt@... [regenrx]" <regenrx@yahoogroups.com> wrote:

  There was an old joke -- a Locomotive Radio -- it whistles at every station!

Sent from my iPhone
On Feb 18, 2016, at 11:51 AM, Paul Ross deadgoose@... [regenrx] <regenrx@yahoogroups.com> wrote:

  There was a concern during WW2 about radiation from the LO in superhets as well as regenerative receivers. Stories could be apocryphal.

I do remember my father mentioning the issue of regenerative receiver radiation in the early days of radio -- late 20s, early 30s -- causing interference on the MW bands.

I would think a buffer amplifier on the input would tend to help that issue, as well as stabilize the detector against antenna "pulling" issues.

73 /paul W3FIS

25869. Re: VK3YE's Ceramic Resonator Regen "Clone"

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-21 05:24:16 UTC
From: w9ifz@...
Topic: 25840 Message: 25869

Who has a source for the 7.16 , 7.12 or 7.15 MHz ceramic resonator. I have tried google, ebay, etc

Thanks, Ak0B
Stan w9ifz at yahoo dot com

25870. Re: [regenrx] Re: VK3YE's Ceramic Resonator Regen "Clone"

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-21 07:12:10 UTC
From: Rob
Topic: 25840 Message: 25870

I bought them cheapest from MOUSER.com for 15 cents.

How many do you need?
I'll send you some..... give me a mailing address.

On 02/21/2016 12:24 AM, w9ifz@... [regenrx] wrote:
>
> Who has a source for the 7.16 , 7.12 or 7.15 MHz ceramic resonator. I
> have tried google, ebay, etc
>
>

25871. Re: [regenrx] Re: VK3YE's Ceramic Resonator Regen "Clone"

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-21 07:30:49 UTC
From: Rob
Topic: 25840 Message: 25871

I see MOUSER is out of stock.
PART NUMBER:
CSTLS7M16G53-A0
is in stock at DIGIKEY.com 25 cents for 1..... $16 for 100

On 02/21/2016 12:24 AM, w9ifz@... [regenrx] wrote:
>
> Who has a source for the 7.16 , 7.12 or 7.15 MHz ceramic resonator. I
> have tried google, ebay, etc
>
>
> Thanks, Ak0B
> Stan w9ifz at yahoo dot com
>

25872. Re: [regenrx] Re: VK3YE's Ceramic Resonator Regen "Clone"

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-21 21:44:49 UTC
From: Jim Simmons
Topic: 25840 Message: 25872

7.16 source:
http://www.digikey.com/product-detail/en/CSTLS7M16G53-A0/490-12586-1-ND/5797568

Jim ~ N5MSJ

On 2/21/2016 1:30 AM, Rob roomberg@... [regenrx] wrote:
>
> I see MOUSER is out of stock.
> PART NUMBER:
> CSTLS7M16G53-A0
> is in stock at DIGIKEY.com 25 cents for 1..... $16 for 100
>
>
>
> On 02/21/2016 12:24 AM, w9ifz@... [regenrx] wrote:
>>
>> Who has a source for the 7.16 , 7.12 or 7.15 MHz ceramic resonator.
>> I have tried google, ebay, etc
>>
>>
>> Thanks, Ak0B
>> Stan w9ifz at yahoo dot com
>
>

25873. Plugin Coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-22 21:39:06 UTC
From: Leonard Meek
Topic: 25873 Message: 25873
Attachments: 1 described; binary payloads are missing from this source WARC

I noticed some time ago that my plugin coils were not matched. It doesn't seem to matter at the lower freqs but becomes quite noticeable higher up. So I threw together a little jig for matching the coils, although I have yet to test them. I'll be doing that tonight after the airways come alive. Meanwhile, here's what I came up with. It's only intended for the grid coil, but can be expanded for others.

Leonard

25874. Re: ECH83 Regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-23 12:37:23 UTC
From: david.newkirk@...
Topic: 25822 Message: 25874

Les wrote:

> David Newkirk wrote that the pentode + Hartley circuit is superior to
> the pentode + Armstrong (tickler) circuit, because the screen grid acts
> as a shield for the anode. His point is that the plate circuit (in a perfect
> circuit) would have NO RF signal present.

That was arguably the dumbest statement I've made in this forum, for _it disallows the operation of the tube as an amplifier_. The interposition of the (ac-grounded) screen between grid and plate greatly reduces _capacitive_ coupling between grid and plate--in RF tubes, that's why we add Grid 2 and that's why we call it a screen--but _of course_ its presence does not preclude _electron coupling_ between grid and plate. And so putting the Armstrong tickler in the plate is merely making use of the tube as an RF amplifier. Arguably, because there's amplification from grid to plate, the use of a screen-grid tube in an Armstrong-feedback regenerative detector should allow (a) the use of lighter feedback coupling than one would need for a triode; (b) a lower-inductance tickler coil; or (c) both. Also arguably--and here's a fun controversy for oscillator historians--an Armstrong-feedback oscillator or detector with its tickler in its plate circuit is therefore no less an _electron-coupled_ oscillator than later circuits (such as Dow's contribution: a tetrode Hartley with screen ac-grounded and output obtained at the plate) for which "electron coupling" was the claim to revolutionariness and fame.

Regenerative detectors that use an Armstrong-feedback-equipped screen-grid RF tube in this way include Grammer's ac-heated regen from December 1930 _QST_, and the detector in National's SW-3 receiver (detailed in an article by James Millen in September 1931 _QST_).

Best regards,

Dave
amateur radio W9BRD
radio pages: http://dpnwritings.nfshost.com/ej/ http://dpnwritings.nfshost.com/ej/

25875. Re: German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-23 13:31:29 UTC
From: david.newkirk@...
Topic: 25613 Message: 25875

Don wrote:

> I am very results oriented. If I can hear on the regen but not on the Digital
> or even my Kenwood TS830S rx and that does happen BTW, then that is
> better performance pure and simple. Means a lot more to me as an active
> ham then 40 pages of spreadsheet and a bunch of squiggly graphs.

Right, so if you can accelerate to 60 mph faster in a Mustang than some herking Peterbilt truck, the Mustang is "better"--no further discussion needed. Or you could acquire a bit of knowledge to grok that the Peterbilt is engineered for power and not for speed.

Try "different" performance, not better. No modern well-engineered commercial HF transceiver will be practically less sensitive than a regen when properly applied. Because modern transceivers and receivers are designed to use a low-impedance antenna--"50 ohms"--what can make a regen _seem_ more sensitive is a scenario like this: Lightly couple a 10-foot wire to the "top" of the tuned circuit in an RFamplifierless regen, hear a given weak signal at, say, 40 meters, and then switch out the regen and connect the same antenna to a modern, commercial HF radio. Now the modern radio seems deaf compared to the regen. Of _course_ it does: A very short wire presents a high impedance at 40 meters, and such an antenna won't produce much input-signal wiggle in a radio optimized for 50 ohms. The regen performs "better" because you are _misapplying_ the better-engineered radio.

I get that you generally don't use your transmitting antenna for receiving and don't see the engineering basis for discussing the issues involved. Such discussions are, it seems, all about math and spreadsheets and squiggly graphs. I'm glad you're having radio fun.

I am myself an aficionado of R. B. Bourne's "I Can't Be Bothered" (http://dpnwritings.nfshost.com/ej/bourne_193207.htm http://dpnwritings.nfshost.com/ej/bourne_193207.htm) However:

Readers of this forum new, well-seasoned and in-between: There's endless self-instructional gold in learning not to mistake the special case for the general and in perpetually recalibrating what you know and understand so you stay aware, and expand your knowledge, of the difference. To some of us, that process is part of the fun.

Best regards,

Dave
amateur radio W9BRD
radio pages: http://dpnwritings.nfshost.com/ej/ http://dpnwritings.nfshost.com/ej/

25876. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-23 15:42:43 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 25876

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /DrM1173/VersatileRegen.gif
Uploaded by : drm1173 <dawmast@...>
Description : A very versatile regen with a differential pair Q-Multiplier and a BJT detector.

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/DrM1173/VersatileRegen.gif

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

drm1173 <dawmast@...>

25877. Re: [regenrx] New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-23 16:37:41 UTC
From: Rob
Topic: 89 Message: 25877

What is the transformer L1 ? Is it an off the shelf part?

On 02/23/2016 10:42 AM, regenrx@yahoogroups.com wrote:
>
>
> Hello,
>
> This email message is a notification to let you know that
> a file has been uploaded to the Files area of the regenrx
> group.
>
> File : /DrM1173/VersatileRegen.gif
> Uploaded by : drm1173 <dawmast@...>
> Description : A very versatile regen with a differential pair
> Q-Multiplier and a BJT detector.
>
> You can access this file at the URL:
> https://groups.yahoo.com/neo/groups/regenrx/files/DrM1173/VersatileRegen.gif
>
> To learn more about file sharing for your group, please visit:
> https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398
>
> Regards,
>
> drm1173 <dawmast@...>
>
>

25878. Re: [regenrx] New file uploaded to regenrx where is the antenna connected

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-23 16:40:21 UTC
From: Rob
Topic: 89 Message: 25878

Where is the antenna connected?

On 02/23/2016 10:42 AM, regenrx@yahoogroups.com wrote:
>
>
> Hello,
>
> This email message is a notification to let you know that
> a file has been uploaded to the Files area of the regenrx
> group.
>
> File : /DrM1173/VersatileRegen.gif
> Uploaded by : drm1173 <dawmast@...>
> Description : A very versatile regen with a differential pair
> Q-Multiplier and a BJT detector.
>
> You can access this file at the URL:
> https://groups.yahoo.com/neo/groups/regenrx/files/DrM1173/VersatileRegen.gif
>
> To learn more about file sharing for your group, please visit:
> https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398
>
> Regards,
>
> drm1173 <dawmast@...>
>
>

25879. Re: German Communications from WWII

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-23 20:19:54 UTC
From: dulmagedon@...
Topic: 25613 Message: 25879

Perhaps before you do an automotive comparison you should google my name. I am going to pretend I didnt read this..
donVE3LYX

25880. Re: New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-24 07:48:44 UTC
From: dawmast@...
Topic: 89 Message: 25880

The antenna can be connected onto Pin 1 of L1 by a small cap of a few pFs. Or L1 can be used as a ferrite loopstick antenna.

25881. File for 7.16 MHz regen XCVR

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-24 23:01:37 UTC
From: Bry Carling
Topic: 25881 Message: 25881

File is failing for me.

I can only get to the main FILES directory and who kn9ws which folder this is on!!

Messages

_____
1.1. New file uploaded to regenrx
Posted by: regenrx@yahoogroups.com
Date: Mon Feb 15, 2016 4:18 am ((PST))

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Ceramic Resonator Regen Trcvr.pdf
Uploaded by : qrper723 <qrper723@...>
Description : VK3YE's Ceramic Resonator Regen Trcvr "CLONE"

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Ceramic%20Resonator%20Regen%20Trcvr.pdf

25882. Re: [regenrx] File for 7.16 MHz regen XCVR backup over here

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-25 01:09:19 UTC
From: Rob
Topic: 25881 Message: 25882

I put some of the images here so I don't lose them:

http://www.learnmorsecode.com/716/index.html

On 02/24/2016 06:01 PM, Bry Carling af4k@... [regenrx] wrote:
>
> File is failing for me.
>
> I can only get to the main FILES directory and who kn9ws which folder this is on!!
>
>
> Messages
> --
> 1.1. New file uploaded to regenrx
> Posted by: regenrx@yahoogroups.com
> Date: Mon Feb 15, 2016 4:18 am ((PST))
>
>
> Hello,
>
>
> This email message is a notification to let you know that
> a file has been uploaded to the Files area of the regenrx
> group.
>
>
> File : /Ceramic Resonator Regen Trcvr.pdf
> Uploaded by : qrper723 <qrper723@...>
> Description : VK3YE's Ceramic Resonator Regen Trcvr "CLONE"
>
>
> You can access this file at the URL:
>
https://groups.yahoo.com/neo/groups/regenrx/files/Ceramic%20Resonator%20Regen%20Trcvr.pdf<
> /a>
> <https://groups.yahoo.com/neo/groups/regenrx/files/Ceramic%20Resonator%20Regen%20Trcvr.p
df>
> <https://groups.yahoo.com/neo/groups/regenrx/files/Ceramic%20Resonator%20Regen%20Trcvr.p
df>
> <https://groups.yahoo.com/neo/groups/regenrx/files/Ceramic%20Resonator%20Regen%20Trcvr.p
df>
>

25883. Re: [regenrx] File for 7.16 MHz regen XCVR backup over here

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-25 09:18:35 UTC
From: qrper723@...
Topic: 25881 Message: 25883

Hello,

I'm sorry I've deleted my version of the schematic diagram because I'm still experimenting every weekend.

Now I put the latest my version into the file folder.

The transmit final is replaced with 2SC2053 for stability and some values has changed for my situation. BD139 has sometimes self oscillation. The transmit signal has a little shaking at keying. But I like it! hi.

The output power is about 500mW to 600mW into the DUMMY LOAD.

ja9mat Hidehiko.

25885. Versatile Regen with an emitter coupled oscillator.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-25 21:00:34 UTC
From: dawmast@...
Topic: 25885 Message: 25885

Here I have a schematic of the Versatile Regen.It has a very useful and a reliable Q-Multiplier with a differential pair around T1 and T2 (emitter coupled oscillator). The 1N4148 diode (D2) provides a reverse bias for the basis-collector junctions of both T1 and T2. This measure reduces the basis-collector capacitances of these junctions, by which the detuning of the tank circuit by T1 and T2 is reduced. Due to the fixed voltage over D2, the voltages over the basis-collector junctions are fixed too. The voltage swing over the tank circuit can be higher before it is current limited when the base-collector junction diodes start conducting. A Q-Multiplier with a differential pair is very easy to build, has a smooth regeneration control, has a wide tuning range over which it can oscillate and it has no problems with squegging and severe loading of the tank circuit due to the small coupling capacitor C1. T1 is an emitter follower which does not load the tank circuit very much.The coupling coil between terminal 3 and 4 of L1 to the detector stage with T3 must not be too big, otherwise regeneration backlash will occur due to the too strong coupling of T3 to the tank circuit. When you use a FET as a Drain Bend Detector which is connected onto the top of the tank circuit, you can use a single coil for L1 with no taps or link windings. I think that a differential pair as a Q-Multiplier is the best type you can use with BJTs, in contrast to the more common Armstrong, Hartley, or Colpitts type Q-Multipliers which are more difficult to optimize.

http://www.uploadarchief.net/files/download/basicregen%282%29.gif

http://www.uploadarchief.net/files/download/basicregen%282%29.gif

http://www.uploadarchief.net/files/download/basicregen...
http://www.uploadarchief.net/files/download/basicregen%282%29.gif

View on www.uploadarchief.net
http://www.uploadarchief.net/files/download/basicregen%282%29.gif
Preview by Yahoo

25886. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-27 22:09:22 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 25886

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Leonard's Stuff/Mk.8 Mod 4e.bmp
Uploaded by : leonardmeek <lemeek@...>
Description : Final Final Update

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Leonard%27s%20Stuff/Mk.8%20Mod%204e.bmp

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

leonardmeek <lemeek@...>

25887. Mk.8 Regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-27 23:43:04 UTC
From: Leonard Meek
Topic: 25887 Message: 25887

I just posted the final update on my Mk.8 regen. I can't think of anything else I can do to it, except maybe add AGC. The component values are pretty much optimum but not absolute. I matched the coils as best I could, but the RF comp is still used to compensate for stray capacitance in the circuit wiring. It tunes from about 0.5 MHz to about 25MHz and has very little drift after a few minutes warmup. SSB is fair. It gets most whatever my SP600 gets, though not any better. It's time to move on.

Leonard

25888. Re: Mk.8 Regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-28 22:42:00 UTC
From: les.au49@...
Topic: 25887 Message: 25888

Hi Leonard, I studied your circuit with great interest. You observe that you resolve S.S.B. well. You don't say superbly - you say "fair". I understand this to mean 'good enough' but you have seen better.

I see you regulate the supply to the detector using a 1N1372 zener. My book shows this as a 75V regulator. 10 watts, I think. The page is blurred a little. Minimalists don't regulate the B+ supply, but that seems to give superior performance.

You use a pentode as the detector; using the Armstrong "tickler" circuit, rather than the tapped-coil Hartley. This is interesting. In these postings David Newkirk suggested that the Hartley circuit uses the screen "in-lieu" of the anode and observed that the screen is grounded. His argument was (if I understand correctly) that the RF that "leaks thru" to the plate was by chance, not design. Yes, this is rather unfortunate language - chance & design - but his point was that the cathode is above earth, not the anode, and that any RF on the screen or anode is "leak-thru", and the cap on G2 proves that point.

So - my first question - in your other sets, do you have the Hartley detector, and would you comment on Hartley vs Armstrong tickler (with a pentode).

Q2 is about the type of tube you use for the detector. You show 6K7 - a sharp cut-off pentode. So you have ever tried a 6K7 - the so-called "remote cut off" (or variable mu) type? If "yes" what difference do you report?

I notice you regulate the heater supply. Bill Cromwell and Arnie Coro do that too. That practice gives greater stability. This take away from the minimalist approach, but seems necessary to get good performance, yes?

Finally, you have 3 stages of A.F. gain before the speaker. Do you need that much gain?

Altogether a nice set, I think; certainly an interesting circuit to study closely - as I did.

Les

25889. Re: [regenrx] Re: Mk.8 Regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-28 23:31:59 UTC
From: Leonard Meek
Topic: 25887 Message: 25889

Les, thanks for the scrutiny. I copied this circuit from the RCA tube manual, with a few modifications. I used the Armstrong circuit because the coils I was using were 4 prong coils and didn't allow a tapped secondary. Also, that's what the RCA circuit used. I tried the 6K7 as the detector but I found the 6J7 was more sensative. I have used the screen feedback on some circuits with good results and would have used it here, but this set is working so well now that I just decided to let well enough alone. The regulated heater supply was a simple way to get the 6V for the detector & first AF, and resulted in some stability as well. As for the 3 AF stages, I had the space so why not? It's easier to reduce a strong signal than to boost a weak one. I'm still exploring the posibilities of AGC. I tried audio derived AGC on one of the sets with disappointing results. I feel IF derived AGC is the way to go.

Leonard

----- Original Message -----
From: les.au49@yahoo.com [regenrx]
To: regenrx@yahoogroups.com
Sent: Sunday, February 28, 2016 12:42 PM
Subject: [regenrx] Re: Mk.8 Regen

Hi Leonard, I studied your circuit with great interest. You observe that you resolve S.S.B. well. You don't say superbly - you say "fair". I understand this to mean 'good enough' but you have seen better.

I see you regulate the supply to the detector using a 1N1372 zener. My book shows this as a 75V regulator. 10 watts, I think. The page is blurred a little. Minimalists don't regulate the B+ supply, but that seems to give superior performance.

You use a pentode as the detector; using the Armstrong "tickler" circuit, rather than the tapped-coil Hartley. This is interesting. In these postings David Newkirk suggested that the Hartley circuit uses the screen "in-lieu" of the anode and observed that the screen is grounded. His argument was (if I understand correctly) that the RF that "leaks thru" to the plate was by chance, not design. Yes, this is rather unfortunate language - chance & design - but his point was that the cathode is above earth, not the anode, and that any RF on the screen or anode is "leak-thru", and the cap on G2 proves that point.

So - my first question - in your other sets, do you have the Hartley detector, and would you comment on Hartley vs Armstrong tickler (with a pentode).

Q2 is about the type of tube you use for the detector. You show 6K7 - a sharp cut-off pentode. So you have ever tried a 6K7 - the so-called "remote cut off" (or variable mu) type? If "yes" what difference do you report?

I notice you regulate the heater supply. Bill Cromwell and Arnie Coro do that too. That practice gives greater stability. This take away from the minimalist approach, but seems necessary to get good performance, yes?

Finally, you have 3 stages of A.F. gain before the speaker. Do you need that much gain?

Altogether a nice set, I think; certainly an interesting circuit to study closely - as I did.

Les

25890. Re: Mk.8 Regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-29 00:31:01 UTC
From: les.au49@...
Topic: 25887 Message: 25890

Hello Leonard! Wow! I always wanted to know about the difference between using a "sharp" vs "remote" cut-off tube (as detector). I don't think I'll get better information than your observation because (1) you used the different tubes in the same circuit and (2) the tubes - 6J7 & 6K7 - provide "side by side" comparison from tubes of the same era (when engineers thought "tubes"). It's possible, of course that your tube was "sus" in some way - but unlikely.

Commenting on the the other points - regulated B+ supply to the detector and heaters - yes, I'm sold on those two points. I can say that Bill Cromwell (hello Bill!) is the great influence on this point; he mentioned it first (or foist, if you come from the Bronx). If you're a minimalist, of course, don't do it, but for those who look for best performance the benefit is good and the cost small.

On the question of A.F. gain, can you say if you need that third tube?

Finally, on the point of AGC - I would tend to think "solid state" - and worse than that to IC's. Yes! Integrated circuits! They are lovely! I would build a circuit rather like a control circuit where I set a "target" voltage, and amplified the difference between target and signal and amplified that difference to use as gain-control. That - suggests a dual pot - one to set "the target" and the other to control final volume. This idea could be easily implemented using an op-amp. In the "standard" AGC system an implied "target" exists - somewhere, but it's not stated explicitly. Non-tube "types" will dislike my idea.

I think the problem with audio-derived AGC is the conflicting requirement that it work at different levels of volume, while at the same time it is derived FROM volume. The concept confuses what is controlled and what is controlling. Audio AGC is fine - until you want to vary the output.

Thanks for publishing your circuit.
Great work!

Les

25891. Re: [regenrx] Re: Mk.8 Regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-29 01:21:37 UTC
From: Leonard Meek
Topic: 25887 Message: 25891

The problem I had with the audio AGC was that during silent periods the bias would die off and then surge back up again when the sound started up again.

Leonard

----- Original Message -----
From: les.au49@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Sunday, February 28, 2016 2:31 PM
Subject: [regenrx] Re: Mk.8 Regen

Hello Leonard! Wow! I always wanted to know about the difference between using a "sharp" vs "remote" cut-off tube (as detector). I don't think I'll get better information than your observation because (1) you used the different tubes in the same circuit and (2) the tubes - 6J7 & 6K7 - provide "side by side" comparison from tubes of the same era (when engineers thought "tubes"). It's possible, of course that your tube was "sus" in some way - but unlikely.

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Thanks for publishing your circuit.
Great work!

Les

25892. Ant coupling to a Hartley regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-29 17:07:17 UTC
From: Hubert Miller
Topic: 25892 Message: 25892

With the Hartley tapped-coil regen detector, there have been some project schematics showing the antenna connected to the coil

tap instead of to the top of the tuned circuit or a separate antenna winding. Has anyone tried this? I am wondering how this

compares with a separate antenna winding. If the antenna coupling with the antenna connected to the 'cathode tap' is still too

tight, and if it works better with a separate, lower tap on the coil provided for the antenna point. Of course i mean a simple

0-V circuit, which means one with no RF stage.

thanks-

Hue Miller

25893. Re: [regenrx] Ant coupling to a Hartley regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-02-29 19:13:53 UTC
From: Leonard Meek
Topic: 25892 Message: 25893

Hue, I tried it but didn't notice a whole lot of improvement. However, I think it was with a 1-V-2 circuit. I may try it again with my 0-V Mk. 3's.

Leonard

----- Original Message -----
From: Hubert Miller kargo_cult@msn.com [regenrx]
To: regenrx@yahoogroups.com
Sent: Monday, February 29, 2016 7:07 AM
Subject: [regenrx] Ant coupling to a Hartley regen

With the Hartley tapped-coil regen detector, there have been some project schematics showing the antenna connected to the coil

tap instead of to the top of the tuned circuit or a separate antenna winding. Has anyone tried this? I am wondering how this

compares with a separate antenna winding. If the antenna coupling with the antenna connected to the 'cathode tap' is still too

tight, and if it works better with a separate, lower tap on the coil provided for the antenna point. Of course i mean a simple

0-V circuit, which means one with no RF stage.

thanks-

Hue Miller

25894. Re: Ant coupling to a Hartley regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-01 02:49:55 UTC
From: david.newkirk@...
Topic: 25892 Message: 25894

Hue wrote:

> With the Hartley tapped-coil regen detector, there have been some project schematics showing
> the antenna connected to the coil tap instead of to the top of the tuned circuit or a
> separate antenna winding. Has anyone tried this? I am wondering how this compares with a
> separate antenna winding. If the antenna coupling with the antenna connected to the ‘cathode tap’
> is still too tight, and if it works better with a separate, lower tap on the coil
> provided for an antenna point.

There is no "one size fits all answer" because how much coupling is appropriate between antenna and detector depends on the antenna in use and the perturbability of the detector. (A high-C detector can generally stand more signal input--is harder to perturb--than a lower-C one.)

And another thing to keep in mind is that we in no way are talking about any sort of impedance matching here. To the contrary, increased power transfer from antenna to detector will also increase power transfer from the detector to the antenna, ultimately lowering regeneration and even disallowing oscillation. This can lead to "dead spots" in tuning ranges.

So all we're really doing in tapping the antenna up and down on the detector coil is adjusting how much signal gets to the detector from a greatly impedance-mismatched antenna. We're actually putting that mismatch--and the attendant _mismatch loss_--to work as means of controlling the detector's signal diet.

That said, tapping the antenna up and down on the tuned circuit directly and tapping the antenna up and down by means of a coupling winding of more or fewer turns provide exactly the same effect in practice. A Hartley detector just happens to give us two ready-made tap points: The top ("hot") end of the coil and the cathode-tap point on the coil. You try whichever seems to work better and call it done.

In practice, especially with longer antennas, the impedance of which can vary from high to low depending on wire length and the frequency of interest, one tap point may well allow the detector to work acceptably well while the other tap point doesn't. So you use the one that subjectively "works better" in any way that seems appropriate--signal strength, smoothness of regeneration, detector stability, detector resistance to overload, whatever. That neither may offer no clear advantage at a given frequency with a given antenna doesn't mean somethings wrong or needs redesigning; it also doesn't mean that the ability to choose between the two tap points won't matter at _some_ frequency with that antenna. Try, try, try.

Best regards,

Dave
amateur radio W9BRD

25895. Re: [regenrx] Re: Mk.8 Regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-01 03:33:32 UTC
From: david.newkirk@...
Topic: 25887 Message: 25895

Leeonard wrote:

> The problem I had with the audio AGC was that during silent periods the bias would die off
> and then surge back up again when the sound started up again.

You're not alone in this experience; it commonly happens with audio-derived AGC even in otherwise soundly designed superhets.

The first cause of the problem is that audio-derived AGC requires the rectification of audio, the number of cycles per second of which is much fewer than the number of cycles per second when the signal being rectified is RF. Charging the capacitor(s) in the AGC circuit therefore takes so relatively long that enough milliseconds pass for the AGC to ramp up to allow a few milliseconds of AGC-_un_controlled audio to get through as a loud pop.

Secondarily, unless your AGCed AF stage[s] operate in push-pull and the control voltage is applied to those push-pull devices in parallel such that any AFish transients on the AGC line cancel in the output of those push-pull amps, the control-voltage steps that are applied to the AGCed-stage grids will itself be audible as noise or audio intermodulation in the output of the AGCed stages. (In the back of an RCA _Receiving Tube Manual_ or three from the 1930s and/or 1940s, the example circuits at the back of the book include an audio compressor circuit that's based on two push-pull 6L7 mixer tubes with their "mixing signal" grids AGCed in parallel to avoid exactly this effect.)

It might be possible to preserve the fast attack of RF-derived AGC with the cleanliness of regenerative- or direct-conversion-receiver audio by converting the detector AF output to RF _just for the purpose of rectifying it to generate AGC_, and then applying the AGC voltage so derived to AF rather than RF or IF stages. This would be an application of _sidechain_ AGC--a system in which a separate IF or RF amplifier chain is used solely to generate AGC for application to an entirely separate amplifier chain. Push-pull AGCed AF stages would still be necessary to keep transients on the AGC line from getting those stages' outputs as pops or IMD noises.

Best regards,

Dave
amateur radiof W9BRD

25896. Re: [regenrx] Re: Mk.8 Regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-01 04:48:46 UTC
From: Leonard Meek
Topic: 25887 Message: 25896

My thoughts exactly, sort of. I've decided to forgo AGC on my regens and maybe try it on the regenodynes. At least there would be a carrier to work with.

On a different note, I was listening to Radio Romania tonight on about 7.34 MHz at 0400 UTC for a half hour. The signal was loud and clear here in Hawaii and there was no sign of fading. The sound was kind of tinny with a slight echo. Are they using a new kind ot transmission? I notice all the adjacent stations fade in & out normally. Just curious.

Leonard

----- Original Message -----
From: david.newkirk@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Monday, February 29, 2016 5:33 PM
Subject: Re: [regenrx] Re: Mk.8 Regen

Leeonard wrote:

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stages' outputs as pops or IMD noises.

Best regards,

Dave
amateur radiof W9BRD

25897. RE: [regenrx] Re: Ant coupling to a Hartley regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-01 07:52:56 UTC
From: Hubert Miller
Topic: 25892 Message: 25897
Attachments: 2 described; binary payloads are missing from this source WARC

Actually, we are sort of talking about an impedance match, if only within roughly defined bounds, nowhere near as stringent as for an apparatus

intended to deliver power to the antenna. As Dave says, too good a match with too close coupling and a smooth approaching regeneration becomes

touchy or regeneration is even lost. But transformer coupling to the tuned circuit via a primary or autotransformer tap does present a better transfer

of signal voltage when using a typical low-Z hamband antenna accessed via coax. And a short antenna of say, just a few feet, of course goes to a high

impedance point. (A resonant antenna will add one more ‘pole’ of selectivity, but the Q is quite low, probably only useful for discriminating against

out of band signals and noise.)
It’s always kind of amazed me how well the good old trimmer capacitor to the top of the tuned circuit works, even when the natural resonance of the

antenna is low at the tuned frequency. I suppose you could say the trimmer reactance cancels part of the antenna’s resonant inductance – as well as

limiting the voltage transfer. Connecting the antenna this way does allow for a wider range of antennas than circuits with only a low impedance input.

But the “real life working job regenerative receivers”, i think, all used transformer input, and they all seem to use the Armtrong – Reinartz tickler coil

circuit. At least those i seem to be recalling now. I think their input Z was characterized around 500 ohms, sort of a compromise high – low.

-Hue

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Monday, February 29, 2016 6:50 PM
To: regenrx@yahoogroups.com
Subject: [regenrx] Re: Ant coupling to a Hartley regen

Hue wrote:

> With the Hartley tapped-coil regen detector, there have been some project schematics showing

> the antenna connected to the coil tap instead of to the top of the tuned circuit or a

> separate antenna winding. Has anyone tried this? I am wondering how this compares with a

> separate antenna winding. If the antenna coupling with the antenna connected to the ‘cathode tap’

> is still too tight, and if it works better with a separate, lower tap on the coil

> provided for an antenna point.

There is no "one size fits all answer" because how much coupling is appropriate between antenna and detector depends on the antenna in use and the perturbability of the detector. (A high-C detector can generally stand more signal input--is harder to perturb--than a lower-C one.)

And another thing to keep in mind is that we in no way are talking about any sort of impedance matching here. To the contrary, increased power transfer from antenna to detector will also increase power transfer from the detector to the antenna, ultimately lowering regeneration and even disallowing oscillation. This can lead to "dead spots" in tuning ranges.

So all we're really doing in tapping the antenna up and down on the detector coil is adjusting how much signal gets to the detector from a greatly impedance-mismatched antenna. We're actually putting that mismatch--and the attendant _mismatch loss_--to work as means of controlling the detector's signal diet.

That said, tapping the antenna up and down on the tuned circuit directly and tapping the antenna up and down by means of a coupling winding of more or fewer turns provide exactly the same effect in practice. A Hartley detector just happens to give us two ready-made tap points: The top ("hot") end of the coil and the cathode-tap point on the coil. You try whichever seems to work better and call it done.

In practice, especially with longer antennas, the impedance of which can vary from high to low depending on wire length and the frequency of interest, one tap point may well allow the detector to work acceptably well while the other tap point doesn't. So you use the one that subjectively "works better" in any way that seems appropriate--signal strength, smoothness of regeneration, detector stability, detector resistance to overload, whatever. That neither may offer no clear advantage at a given frequency with a given antenna doesn't mean somethings wrong or needs redesigning; it also doesn't mean that the ability to choose between the two tap points won't matter at _some_ frequency with that antenna. Try, try, try.

Best regards,

Dave

amateur radio W9BRD

25898. Re: [regenrx] Ant coupling to a Hartley regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-03 17:04:30 UTC
From: Prof. Arnaldo Coro Antich
Topic: 25892 Message: 25898

One of the most important aspects regarding how to make the
incoming radio signal feed the detector circuit * in this case
a regenerative detector with no RF amplifier * is to be able
to provide a very precise degree of coupling to the detector
coil... This is accomplished in one of my favorite regeneratives
with a mechanical system , controlled from the front panel, that
moves a single or two turns air wound coil that slides, more or less
separated , from the grid tuned circuit coil...
This is in essence an inductive plus a little capacitance coupling
system, that has proven to be extremely effective in delivering to
the detector the proper level required for good signals pickup...
When using one RF stage ahead of the detector... in the untuned
grounded grid configuration...one can install a good quality
potentiometer to the cathode of the triode, and feed the signal
via a capacitor to this resistive attenuator control !!!
Likewise , when using a tuned RF amplifier, you can use a good
quality carbon potentiometer between the antenna and the
coupling link coil ... values between 1k and 10 k seem to work
well....
73 and DX
Arnie Coro
CO2KK
An advocate of Regenerative and Regenerodyne radios !!!

On 02/29/2016 12:07 PM, Hubert Miller kargo_cult@... [regenrx] wrote:
>
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> With the Hartley tapped-coil regen detector, there have been some
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> tight, and if it works better with a separate, lower tap on the coil
> provided for the antenna point. Of course i mean a simple
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> 0-V circuit, which means one with no RF stage.
>
> thanks-
>
> Hue Miller
>

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25899. Re: [regenrx] Ant coupling to a Hartley regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-03 17:51:15 UTC
From: Rob
Topic: 25892 Message: 25899

Hi Arnie,
Is there a picture of that mechanical system anywhere on the web?

and
did you get the 7.16 Mhz resonators I mailed to you?

73 Rob KB3BYT

On 03/03/2016 12:04 PM, 'Prof. Arnaldo Coro Antich' coro@...
[regenrx] wrote:
>
> One of the most important aspects regarding how to make the
> incoming radio signal feed the detector circuit * in this case
> a regenerative detector with no RF amplifier * is to be able
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>> thanks-
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>> Hue Miller
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25900. Re: [regenrx] Ant coupling to a Hartley regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-04 12:04:55 UTC
From: Prof. Arnaldo Coro Antich
Topic: 25892 Message: 25900

HOLA AMIGO!!!
Not that I remember... I saw that very clever variable coupling link
on an article in an old ELECTRIC RADIO US magazine, devoted
to vacuum tube equipment... The photos show how it is built for
a regenerative receiver that uses a 6J5 triode as the detector...
I do not have a scanner.. but maybe it would be possible to take
a photo of the article, if I can locate the ELECTRIC RADIO issue
in my not too well organized library !!!!
So far no message from the post office to go and pick up
something...
It seems likely that soon , after more than 50 years of INCOMMUNICADO
postal services, regular mail will be started between our two
nations...according to a recent joint press release by the Correos de
Cuba and the US Postal Service...
Up to now, all correspondence has to go routed through a third
country !!! And much of it is lost or pilfered in the case of parcels !!!

73 and DX
your friend in sunny La Habana
Arnie
CO2KK

On 03/03/2016 12:51 PM, Rob roomberg@... [regenrx] wrote:
>
>
> Hi Arnie,
> Is there a picture of that mechanical system anywhere on the web?
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> and
> did you get the 7.16 Mhz resonators I mailed to you?
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> 73 Rob KB3BYT
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> On 03/03/2016 12:04 PM, 'Prof. Arnaldo Coro Antich' coro@...
> [regenrx] wrote:
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>>> 0-V circuit, which means one with no RF stage.
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>>> thanks-
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>>> Hue Miller
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25901. Fwd: Re: [regenrx] Ant coupling to a Hartley regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-04 15:05:27 UTC
From: Prof. Arnaldo Coro Antich
Topic: 25892 Message: 25901

WOW !
I found it.... together , mixed into the stack of SPRAT Magazine, the
G QRP Club publication.
ELECTRIC RADIO
NUMBER 134
JUNE 2000
PAGES 20 TO 27
A WONDERFULLY WELL WRITTEN TECHNICAL ARTICLE ABOUT
REGENERATIVE RECEIVERS....THE 6J5 REGENERATIVE DETECTOR
CIRCUIT THAT THE AUTHOR USES WORKS VERY WELL, WITH
A NICE SMOOTH REGENERATION CONTROL ...
I tried it with a 6C4 and also with half of a 12AU7 * same as 6C4 *
then an attempt to use the 12AT7 / ECC81 did not worked so well
possible to it having a much higher MU * amplification factor "
May I suggest also that all of you download the ZL2JJ Regenerative
Receiver because it a pacesetter of all times, including the
magnificent mechanical construction... The one I built years ago
had newer , but similar vacuum tubes, but my very limited
mechanical abilities, and lack of a machine shop * the two combined
against me * made me dis-assemble my ZL2JJ for recycling some
of the hard to find parts....
73 and DX
Arnie Coro
CO2KK
Host of Dxers Unlimited radio hobby program
Radio Havana Cuba
http://www.radiohc.cu

HOLA AMIGO!!!
Not that I remember... I saw that very clever variable coupling link
on an article in an old ELECTRIC RADIO US magazine, devoted
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I do not have a scanner.. but maybe it would be possible to take
a photo of the article, if I can locate the ELECTRIC RADIO issue
in my not too well organized library !!!!
So far no message from the post office to go and pick up
something...
It seems likely that soon , after more than 50 years of INCOMMUNICADO
postal services, regular mail will be started between our two
nations...according to a recent joint press release by the Correos de
Cuba and the US Postal Service...
Up to now, all correspondence has to go routed through a third
country !!! And much of it is lost or pilfered in the case of parcels !!!

73 and DX
your friend in sunny La Habana
Arnie
CO2KK

On 03/03/2016 12:51 PM, Rob roomberg@... [regenrx] wrote:
> Hi Arnie,
> Is there a picture of that mechanical system anywhere on the web?
>
> and
> did you get the 7.16 Mhz resonators I mailed to you?
>
> 73 Rob KB3BYT
>
>
> On 03/03/2016 12:04 PM, 'Prof. Arnaldo Coro Antich' coro@...
> [regenrx] wrote:
>>
>> One of the most important aspects regarding how to make the
>> incoming radio signal feed the detector circuit * in this case
>> a regenerative detector with no RF amplifier * is to be able
>> to provide a very precise degree of coupling to the detector
>> coil... This is accomplished in one of my favorite regeneratives
>> with a mechanical system , controlled from the front panel, that
>> moves a single or two turns air wound coil that slides, more or less
>> separated , from the grid tuned circuit coil...
>> This is in essence an inductive plus a little capacitance coupling
>> system, that has proven to be extremely effective in delivering to
>> the detector the proper level required for good signals pickup...
>> When using one RF stage ahead of the detector... in the untuned
>> grounded grid configuration...one can install a good quality
>> potentiometer to the cathode of the triode, and feed the signal
>> via a capacitor to this resistive attenuator control !!!
>> Likewise , when using a tuned RF amplifier, you can use a good
>> quality carbon potentiometer between the antenna and the
>> coupling link coil ... values between 1k and 10 k seem to work
>> well....
>> 73 and DX
>> Arnie Coro
>> CO2KK
>> An advocate of Regenerative and Regenerodyne radios !!!
>>
>> On 02/29/2016 12:07 PM, Hubert Miller kargo_cult@... [regenrx] wrote:
>>>
>>> With the Hartley tapped-coil regen detector, there have been some
>>> project schematics showing the antenna connected to the coil
>>>
>>> tap instead of to the top of the tuned circuit or a separate antenna
>>> winding. Has anyone tried this? I am wondering how this
>>>
>>> compares with a separate antenna winding. If the antenna coupling

>>> with the antenna connected to the ?cathode tap? is still too
>>>
>>> tight, and if it works better with a separate, lower tap on the coil
>>> provided for the antenna point. Of course i mean a simple
>>>
>>> 0-V circuit, which means one with no RF stage.
>>>
>>> thanks-
>>>
>>> Hue Miller
>>>
>>
>

25902. Re: Re: [regenrx] Ant coupling to a Hartley regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-04 17:26:04 UTC
From: Leonard Meek
Topic: 25892 Message: 25902

Arnie, my Mk.8 regen is similar to the ZL2JJ and it works very well. But I see several things from his schematic that I can use to improve my set. I'm currently working on my Mk.14 and I still wonder how I can receive Radio Romania here in Hawaii so clearly with no fading. There seems to be a slight echo, so I wonder if the signal is coming from two sources. Just curious.

Leonard

----- Original Message -----
From: 'Prof. Arnaldo Coro Antich' coro@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Friday, March 04, 2016 5:05 AM
Subject: Fwd: Re: [regenrx] Ant coupling to a Hartley regen

WOW !
I found it.... together , mixed into the stack of SPRAT Magazine, the
G QRP Club publication.
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JUNE 2000
PAGES 20 TO 27
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REGENERATIVE RECEIVERS....THE 6J5 REGENERATIVE DETECTOR
CIRCUIT THAT THE AUTHOR USES WORKS VERY WELL, WITH
A NICE SMOOTH REGENERATION CONTROL ...
I tried it with a 6C4 and also with half of a 12AU7 * same as 6C4 *
then an attempt to use the 12AT7 / ECC81 did not worked so well
possible to it having a much higher MU * amplification factor "
May I suggest also that all of you download the ZL2JJ Regenerative
Receiver because it a pacesetter of all times, including the
magnificent mechanical construction... The one I built years ago
had newer , but similar vacuum tubes, but my very limited
mechanical abilities, and lack of a machine shop * the two combined
against me * made me dis-assemble my ZL2JJ for recycling some
of the hard to find parts....
73 and DX
Arnie Coro
CO2KK
Host of Dxers Unlimited radio hobby program
Radio Havana Cuba
http://www.radiohc.cu

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25903. Re: [regenrx] Ant coupling to a Hartley regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-04 17:42:59 UTC
From: Rob
Topic: 25892 Message: 25903

You say:
"But I see several things from his schematic"

Can you point me to a web page of this schematic?

On 03/04/2016 12:26 PM, 'Leonard Meek' lemeek@... [regenrx]
wrote:
>
> Arnie, my Mk.8 regen is similar to the ZL2JJ and it works very well.
> But I see several things from his schematic that I can use to improve
> my set. I'm currently working on my Mk.14 and I still wonder how I can
> receive Radio Romania here in Hawaii so clearly with no fading. There
> seems to be a slight echo, so I wonder if the signal is coming from
> two sources. Just curious.
> Leonard
>
> ----- Original Message -----
> *From:* 'Prof. Arnaldo Coro Antich' coro@... [regenrx]
> <mailto:coro@...%20[regenrx]>
> *To:* regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>
> *Sent:* Friday, March 04, 2016 5:05 AM
> *Subject:* Fwd: Re: [regenrx] Ant coupling to a Hartley regen
>
>
>
> WOW !
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> G QRP Club publication.
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> CIRCUIT THAT THE AUTHOR USES WORKS VERY WELL, WITH
> A NICE SMOOTH REGENERATION CONTROL ...
> I tried it with a 6C4 and also with half of a 12AU7 * same as 6C4 *
> then an attempt to use the 12AT7 / ECC81 did not worked so well
> possible to it having a much higher MU * amplification factor "
> May I suggest also that all of you download the ZL2JJ Regenerative
> Receiver because it a pacesetter of all times, including the
> magnificent mechanical construction... The one I built years ago
> had newer , but similar vacuum tubes, but my very limited
> mechanical abilities, and lack of a machine shop * the two combined
> against me * made me dis-assemble my ZL2JJ for recycling some

> of the hard to find parts....
> 73 and DX
> Arnie Coro
> CO2KK
> Host of Dxers Unlimited radio hobby program
> Radio Havana Cuba
> http://www.radiohc.cu
>
>
> _,_._,___
>
>

25904. Re: [regenrx] Ant coupling to a Hartley regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-04 18:01:59 UTC
From: Bill Cromwell
Topic: 25892 Message: 25904

On 03/04/2016 12:42 PM, Rob roomberg@... [regenrx] wrote:
>
> You say:
> "But I see several things from his schematic"
>
> Can you point me to a web page of this schematic?
>
Here you go Rob:

http://www.w7ekb.com/glowbugs/rx/Regens/ZL2JJ/zl2jj_trf.htm

73,

Bill KU8H

25905. Re: [regenrx] Ant coupling to a Hartley regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-04 20:13:47 UTC
From: Leonard Meek
Topic: 25892 Message: 25905

I just Googled, "ZL2JJ Receiver." The whole thing is there.
----- Original Message -----
From: Rob roomberg@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Friday, March 04, 2016 7:42 AM
Subject: Re: [regenrx] Ant coupling to a Hartley regen

You say:
"But I see several things from his schematic"

Can you point me to a web page of this schematic?

On 03/04/2016 12:26 PM, 'Leonard Meek' lemeek@... [regenrx] wrote:

Arnie, my Mk.8 regen is similar to the ZL2JJ and it works very well. But I see several things from his schematic that I can use to improve my set. I'm currently working on my Mk.14 and I still wonder how I can receive Radio Romania here in Hawaii so clearly with no fading. There seems to be a slight echo, so I wonder if the signal is coming from two sources. Just curious.

Leonard

----- Original Message -----
From: 'Prof. Arnaldo Coro Antich' coro@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Friday, March 04, 2016 5:05 AM
Subject: Fwd: Re: [regenrx] Ant coupling to a Hartley regen

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then an attempt to use the 12AT7 / ECC81 did not worked so well
possible to it having a much higher MU * amplification factor "
May I suggest also that all of you download the ZL2JJ Regenerative
Receiver because it a pacesetter of all times, including the
magnificent mechanical construction... The one I built years ago
had newer , but similar vacuum tubes, but my very limited
mechanical abilities, and lack of a machine shop * the two combined

against me * made me dis-assemble my ZL2JJ for recycling some
of the hard to find parts....
73 and DX
Arnie Coro
CO2KK
Host of Dxers Unlimited radio hobby program
Radio Havana Cuba
http://www.radiohc.cu

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25906. Re: [regenrx] Ant coupling to a Hartley regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-04 20:48:35 UTC
From: Prof. Arnaldo Coro Antich
Topic: 25892 Message: 25906

Hola amigos !
During periods of very low solar activity, around the spring and autumn
equinox we always see some very interesting propagation enhancements
that last for a few weeks before, during and after the actual equinox
days * minus and plus around a week *
Sometimes I receive similar reports about how Radio Havana Cuba
is heard in Australia and New Zealand very well twice every year
with especially good signals on the 5000, 6000 and around 9.5 megaHertz
When the Earth receives equal solar radiation the propagation
enhancements are more noticeable !!! And sometimes, when using
almost non directional transmitting antennas, signals can travel
from East to West , and also along the LONG PATH too. The LONG PATH
introduces a delay so that when both signals reach Hawaii, Australia
and New Zealand you hear a sort of ECHO, or maybe a tinny sounding
audio !!!
Propagation of signals from 3 to 30 megaHertz via an ionized medium
is still something that requires more research !!!
I have made radio amateur bands contacts using 100 milliWatts to
a zero dB gain antenna ... and regular CW !!! Moving to 10 milliWatts
carefully checked with proper measurements still delivered
a useful signal at the other end of the 2000 kilometers skywave path !!!
73 and DX
Arnie Coro
CO2KK

On 03/04/2016 12:42 PM, Rob roomberg@... [regenrx] wrote:
>
>
> You say:
> "But I see several things from his schematic"
>
> Can you point me to a web page of this schematic?
>
>
> On 03/04/2016 12:26 PM, 'Leonard Meek' lemeek@...
> [regenrx] wrote:
>>
>> Arnie, my Mk.8 regen is similar to the ZL2JJ and it works very well.
>> But I see several things from his schematic that I can use to improve
>> my set. I'm currently working on my Mk.14 and I still wonder how I
>> can receive Radio Romania here in Hawaii so clearly with no fading.
>> There seems to be a slight echo, so I wonder if the signal is coming
>> from two sources. Just curious.
>> Leonard
>>

>> ----- Original Message -----
>> *From:* 'Prof. Arnaldo Coro Antich' coro@... [regenrx]
>> <mailto:coro@...%20[regenrx]>
>> *To:* regenrx@yahoogroups.com
>> *Sent:* Friday, March 04, 2016 5:05 AM
>> *Subject:* Fwd: Re: [regenrx] Ant coupling to a Hartley regen
>>
>>
>>
>> WOW !
>> I found it.... together , mixed into the stack of SPRAT Magazine, the
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>> A NICE SMOOTH REGENERATION CONTROL ...
>> I tried it with a 6C4 and also with half of a 12AU7 * same as 6C4 *
>> then an attempt to use the 12AT7 / ECC81 did not worked so well
>> possible to it having a much higher MU * amplification factor "
>> May I suggest also that all of you download the ZL2JJ Regenerative
>> Receiver because it a pacesetter of all times, including the
>> magnificent mechanical construction... The one I built years ago
>> had newer , but similar vacuum tubes, but my very limited
>> mechanical abilities, and lack of a machine shop * the two combined
>> against me * made me dis-assemble my ZL2JJ for recycling some
>> of the hard to find parts....
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>> Host of Dxers Unlimited radio hobby program
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>>
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>> _,_._,___
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>

25907. Re: [regenrx] Ant coupling to a Hartley regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-04 23:30:40 UTC
From: Leonard Meek
Topic: 25892 Message: 25907

Thanks for the explanation, Arnie. Now I know. That explains how I was able to pick up South Africa and others. Havana and Brazil still come in quite strong.

Leonard

----- Original Message -----
From: 'Prof. Arnaldo Coro Antich' coro@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Friday, March 04, 2016 10:48 AM
Subject: Re: [regenrx] Ant coupling to a Hartley regen

Hola amigos !
During periods of very low solar activity, around the spring and autumn
equinox we always see some very interesting propagation enhancements
that last for a few weeks before, during and after the actual equinox
days * minus and plus around a week *
Sometimes I receive similar reports about how Radio Havana Cuba
is heard in Australia and New Zealand very well twice every year
with especially good signals on the 5000, 6000 and around 9.5 megaHertz
When the Earth receives equal solar radiation the propagation
enhancements are more noticeable !!! And sometimes, when using
almost non directional transmitting antennas, signals can travel
from East to West , and also along the LONG PATH too. The LONG PATH
introduces a delay so that when both signals reach Hawaii, Australia
and New Zealand you hear a sort of ECHO, or maybe a tinny sounding
audio !!!
Propagation of signals from 3 to 30 megaHertz via an ionized medium
is still something that requires more research !!!
I have made radio amateur bands contacts using 100 milliWatts to
a zero dB gain antenna ... and regular CW !!! Moving to 10 milliWatts
carefully checked with proper measurements still delivered
a useful signal at the other end of the 2000 kilometers skywave path !!!
73 and DX
Arnie Coro
CO2KK

On 03/04/2016 12:42 PM, Rob roomberg@... [regenrx] wrote:

You say:
"But I see several things from his schematic"

Can you point me to a web page of this schematic?

On 03/04/2016 12:26 PM, 'Leonard Meek' lemeek@... [regenrx] wrote:

Arnie, my Mk.8 regen is similar to the ZL2JJ and it works very well. But I see several things from his schematic that I can use to improve my set. I'm currently working on my

Mk.14 and I still wonder how I can receive Radio Romania here in Hawaii so clearly with no fading. There seems to be a slight echo, so I wonder if the signal is coming from two sources. Just curious.

Leonard

----- Original Message -----
From: 'Prof. Arnaldo Coro Antich' coro@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Friday, March 04, 2016 5:05 AM
Subject: Fwd: Re: [regenrx] Ant coupling to a Hartley regen

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magnificent mechanical construction... The one I built years ago
had newer , but similar vacuum tubes, but my very limited
mechanical abilities, and lack of a machine shop * the two combined
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of the hard to find parts....
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CO2KK
Host of Dxers Unlimited radio hobby program
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–’–·–’–––

25908. Re: [regenrx] Ant coupling to a Hartley regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-05 04:25:55 UTC
From: Rob
Topic: 25892 Message: 25908

THANK YOU for the link

I don't know why but I did not get this web page when I GOOGLEd "ZL2JJ Receiver"
This interweb is a funky thing sometimes.

On 03/04/2016 01:01 PM, Bill Cromwell wrcromwell@... [regenrx] wrote:
> On 03/04/2016 12:42 PM, Rob roomberg@... [regenrx] wrote:
>> You say:
>> "But I see several things from his schematic"
>>
>> Can you point me to a web page of this schematic?
>>
> Here you go Rob:
>
> http://www.w7ekb.com/glowbugs/rx/Regens/ZL2JJ/zl2jj_trf.htm
>
> 73,
>
> Bill KU8H
>
>
>
> ------------------------------------
>
> ------------------------------------
>
> "In the interest of Regenerating radio's lost art of Regeneration"
> ------------------------------------
>
> Yahoo Groups Links
>
>
>
>

25909. Re: [regenrx] Ant coupling to a Hartley regen mechanicals

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-05 19:33:23 UTC
From: Rob
Topic: 25909 Message: 25909

re: What exactly were you looking for?

PICTURES

Without including all the emails... just sort of nutshell recap....
I may not get it all correct but I think it went like this:
Arnie posted a description of a mechanical linkage that worked for
receivers which gelled into ZL2JJ projects.... pointing at
http://www.w7ekb.com/glowbugs/rx/Regens/ZL2JJ/zl2jj_trf.htm

My interest is in pictures of what Arnie was describing in his text in
emails.
Pictures of a schematic that mates with pictures of mechanical parts so
I can attempt to replicate known working circuits and the mechanical parts
that just do not exist in my modern world to reference.

Arnie seems a bit techno crippled in that he can not simply snap a picture
and post it to the YAHOO reflector.
It would be much better for all of us trying to learn from great sources
like Arnie
if Arnie COULD take a picture.
I just bought a Android smartphone at Walmart for $20.
It has a great camera in it that takes up close circuit pictures just fine.
I'm thinking its time to mail Arnie a camera... or a dirt cheat
smartphone like this..... that he can
plug into his PC and post pictures on the web....
or at least email pictures to us that WE post on the web for him.
But then Arnie said the mail service is real slow and very unreliable
since I sent 7.16 resonators to him
at the same time I sent 7.16 resonators to UK.
Arnie didn't get his resonators while UK got them in 7 days.

Can anyone recommend a way to get Arnie a camera so he can share his
radios ,schematics...pictures?

ELECTRIC RADIO web page will sell back issues.
I guess I have to buy this issue to get a picture.

++
WOW !
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had newer , but similar vacuum tubes, but my very limited
mechanical abilities, and lack of a machine shop * the two combined
against me * made me dis-assemble my ZL2JJ for recycling some
of the hard to find parts....
73 and DX
Arnie Coro
CO2KK
Host of Dxers Unlimited radio hobby program
Radio Havana Cuba
http://www.radiohc.cu

++
HOLA AMIGO!!!
Not that I remember... I saw that very clever variable coupling link
on an article in an old ELECTRIC RADIO US magazine, devoted
to vacuum tube equipment... The photos show how it is built for
a regenerative receiver that uses a 6J5 triode as the detector...
I do not have a scanner.. but maybe it would be possible to take
a photo of the article, if I can locate the ELECTRIC RADIO issue
in my not too well organized library !!!!
So far no message from the post office to go and pick up
something...
It seems likely that soon , after more than 50 years of INCOMMUNICADO
postal services, regular mail will be started between our two
nations...according to a recent joint press release by the Correos de
Cuba and the US Postal Service...
Up to now, all correspondence has to go routed through a third
country !!! And much of it is lost or pilfered in the case of parcels !!!

73 and DX
your friend in sunny La Habana
Arnie
CO2KK
++

>
>
> One of the most important aspects regarding how to make the
> incoming radio signal feed the detector circuit * in this case
> a regenerative detector with no RF amplifier * is to be able
> to provide a very precise degree of coupling to the detector
> coil... This is accomplished in one of my favorite regeneratives

> with a mechanical system , controlled from the front panel, that
> moves a single or two turns air wound coil that slides, more or less
> separated , from the grid tuned circuit coil...
> This is in essence an inductive plus a little capacitance coupling
> system, that has proven to be extremely effective in delivering to
> the detector the proper level required for good signals pickup...
> When using one RF stage ahead of the detector... in the untuned
> grounded grid configuration...one can install a good quality
> potentiometer to the cathode of the triode, and feed the signal
> via a capacitor to this resistive attenuator control !!!
> Likewise , when using a tuned RF amplifier, you can use a good
> quality carbon potentiometer between the antenna and the
> coupling link coil ... values between 1k and 10 k seem to work
> well....
> 73 and DX
> Arnie Coro
> CO2KK
> An advocate of Regenerative and Regenerodyne radios !!!

25910. Re: [regenrx] Ant coupling to a Hartley regen mechanicals

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-05 20:45:18 UTC
From: John Marshall
Topic: 25909 Message: 25910

Rob,

I haven't followed much of this thread and may be covering old ground but here's a web page showing a nice regen with variable link antenna coupling:

< http://www.qsl.net/k7fj/Ultimate%20Regen.html >

Hope this helps...

John, KU4AF
Pittsboro, NC

On Mar 5, 2016, at 2:33 PM, Rob roomberg@ptd.net [regenrx] wrote:

> re: What exactly were you looking for?
>
> PICTURES
>
> Without including all the emails... just sort of nutshell recap....
> I may not get it all correct but I think it went like this:
> Arnie posted a description of a mechanical linkage that worked for
> receivers which gelled into ZL2JJ projects.... pointing at
> http://www.w7ekb.com/glowbugs/rx/Regens/ZL2JJ/zl2jj_trf.htm
>
> My interest is in pictures of what Arnie was describing in his text in
> emails.
> Pictures of a schematic that mates with pictures of mechanical parts so
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> Arnie seems a bit techno crippled in that he can not simply snap a picture
> and post it to the YAHOO reflector.
> It would be much better for all of us trying to learn from great sources
> like Arnie
> if Arnie COULD take a picture.
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> smartphone like this..... that he can
> plug into his PC and post pictures on the web....
> or at least email pictures to us that WE post on the web for him.
> But then Arnie said the mail service is real slow and very unreliable
> since I sent 7.16 resonators to him
> at the same time I sent 7.16 resonators to UK.
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> Can anyone recommend a way to get Arnie a camera so he can share his
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> I tried it with a 6C4 and also with half of a 12AU7 * same as 6C4 *
> then an attempt to use the 12AT7 / ECC81 did not worked so well
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> had newer , but similar vacuum tubes, but my very limited
> mechanical abilities, and lack of a machine shop * the two combined
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>
>
>
>
> ++
> HOLA AMIGO!!!
> Not that I remember... I saw that very clever variable coupling link
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> postal services, regular mail will be started between our two
> nations...according to a recent joint press release by the Correos de
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> Arnie
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>> grounded grid configuration...one can install a good quality
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25911. Re: [regenrx] Ant coupling to a Hartley regen mechanicals

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-05 21:17:50 UTC
From: John
Topic: 25909 Message: 25911

Or you can try www.nr5q.com. Check out his homebrew radios, and you'll find pictures of a variable link. It's an excellent website and reference. And I believe NR5Q was the author of the article that Arnie cited.

Sent from my iPhone

> On Mar 5, 2016, at 3:45 PM, John Marshall johnmars@mindspring.com [regenrx] <regenrx@yahoogroups.com> wrote:
>
> Rob,
>
> I haven't followed much of this thread and may be covering old ground but here's a web page showing a nice regen with variable link antenna coupling:
>
> < http://www.qsl.net/k7fj/Ultimate%20Regen.html >
>
> Hope this helps...
>
> John, KU4AF
> Pittsboro, NC
>
> On Mar 5, 2016, at 2:33 PM, Rob roomberg@ptd.net [regenrx] wrote:
>
> > re: What exactly were you looking for?
> >
> > PICTURES
> >
> > Without including all the emails... just sort of nutshell recap....
> > I may not get it all correct but I think it went like this:
> > Arnie posted a description of a mechanical linkage that worked for
> > receivers which gelled into ZL2JJ projects.... pointing at
> > http://www.w7ekb.com/glowbugs/rx/Regens/ZL2JJ/zl2jj_trf.htm
> >
> > My interest is in pictures of what Arnie was describing in his text in
> > emails.
> > Pictures of a schematic that mates with pictures of mechanical parts so
> > I can attempt to replicate known working circuits and the mechanical parts
> > that just do not exist in my modern world to reference.
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> > Arnie seems a bit techno crippled in that he can not simply snap a picture
> > and post it to the YAHOO reflector.
> > It would be much better for all of us trying to learn from great sources
> > like Arnie
> > if Arnie COULD take a picture.
> > I just bought a Android smartphone at Walmart for $20.

> > It has a great camera in it that takes up close circuit pictures just fine.
> > I'm thinking its time to mail Arnie a camera... or a dirt cheat
> > smartphone like this..... that he can
> > plug into his PC and post pictures on the web....
> > or at least email pictures to us that WE post on the web for him.
> > But then Arnie said the mail service is real slow and very unreliable
> > since I sent 7.16 resonators to him
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> > Arnie didn't get his resonators while UK got them in 7 days.
> >
> > Can anyone recommend a way to get Arnie a camera so he can share his
> > radios ,schematics...pictures?
> >
> > ELECTRIC RADIO web page will sell back issues.
> > I guess I have to buy this issue to get a picture.
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> > ++
> > WOW !
> > I found it.... together , mixed into the stack of SPRAT Magazine, the
> > G QRP Club publication.
> > ELECTRIC RADIO
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> > JUNE 2000
> > PAGES 20 TO 27
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> > REGENERATIVE RECEIVERS....THE 6J5 REGENERATIVE DETECTOR
> > CIRCUIT THAT THE AUTHOR USES WORKS VERY WELL, WITH
> > A NICE SMOOTH REGENERATION CONTROL ...
> > I tried it with a 6C4 and also with half of a 12AU7 * same as 6C4 *
> > then an attempt to use the 12AT7 / ECC81 did not worked so well
> > possible to it having a much higher MU * amplification factor "
> > May I suggest also that all of you download the ZL2JJ Regenerative
> > Receiver because it a pacesetter of all times, including the
> > magnificent mechanical construction... The one I built years ago
> > had newer , but similar vacuum tubes, but my very limited
> > mechanical abilities, and lack of a machine shop * the two combined
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25912. Re: [regenrx] Ant coupling to a Hartley regen mechanicals

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-06 00:13:01 UTC
From: Zoran Tukovic
Topic: 25909 Message: 25912

Complete articles about Bruce Vaughn's (NR5Q) "Ultimate Regen" with genius inductive variable antenna coupling you can find in PDF at: regenrx / Files / Tuky FIles / The Ultimate Regenerative Receiver (A Four-Tube (0-V-3) Regenerative Receiver by Bruce Vaughan, NR5Q).

Bruce style of writing is phenomenal.

Regards,
Tuky
<https://xa.yimg.com/df/regenrx/The+Ultimate+Regenerative+Receiver.pdf?token=ICWl9BF8crJwiTolkmaT_QgHEwY8LLKyN_VckE0iAXTIEzUxRibzqi0BxkaLYPIIE9cwFfVvVmnPVxTZyVLnYrJAIZj-yBWq-l8olfOsQEswI-eDniT5YvhIjzhvO80cIZWnwG2HzbcEX_4eBGsfSct80EzA3bCe&type=download>

On Sat, Mar 5, 2016 at 8:33 PM, Rob roomberg@... [regenrx] <regenrx@yahoogroups.com> wrote:

>
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> re: What exactly were you looking for?
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> PICTURES
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> Without including all the emails... just sort of nutshell recap....
> I may not get it all correct but I think it went like this:
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> My interest is in pictures of what Arnie was describing in his text in
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> It would be much better for all of us trying to learn from great sources
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> It has a great camera in it that takes up close circuit pictures just fine.
> I'm thinking its time to mail Arnie a camera... or a dirt cheat
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25913. Re: [regenrx] Ant coupling to a Hartley regen mechanicals

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-06 01:14:25 UTC
From: Leonard Meek
Topic: 25909 Message: 25913

Bruce also wrote a book called, "Surviving Technology" featuring the Ultimatr Regen.

Leonard

----- Original Message -----
From: Zoran Tukovic ztukovic@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Saturday, March 05, 2016 2:13 PM
Subject: Re: [regenrx] Ant coupling to a Hartley regen mechanicals

Complete articles about Bruce Vaughn's (NR5Q) "Ultimate Regen" with genius inductive variable antenna coupling you can find in PDF at: regenrx / Files / Tuky FIles / The Ultimate Regenerative Receiver (A Four-Tube (0-V-3) Regenerative Receiver by Bruce Vaughan, NR5Q).

Bruce style of writing is phenomenal.

Regards,

Tuky

On Sat, Mar 5, 2016 at 8:33 PM, Rob roomberg@... [regenrx] <regenrx@yahoogroups.com> wrote:

re: What exactly were you looking for?

PICTURES

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http://www.w7ekb.com/glowbugs/rx/Regens/ZL2JJ/zl2jj_trf.htm

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25914. Re: [regenrx] Ant coupling to a Hartley regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-06 01:44:42 UTC
From: Bill Cromwell
Topic: 25892 Message: 25914

Hi Rob,

You're welcome. I always assume that a request like yours comes *after*
a Google attempt that ended in frustration. My search term was "ZL2JJ
regen". You and I know that means the same thing. Unfortunately
computers are dumb as a box of rox! <evil grin> This time I got lucky.

73,

Bill KU8H

On 03/04/2016 11:25 PM, Rob roomberg@... [regenrx] wrote:
> THANK YOU for the link
>
> I don't know why but I did not get this web page when I GOOGLEd "ZL2JJ
> Receiver"
> This interweb is a funky thing sometimes.
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25915. Re: [regenrx] Ant coupling to a Hartley regen mechanicals

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-06 01:50:36 UTC
From: Bill Cromwell
Topic: 25909 Message: 25915

Hi Rob,

You might also look for something called a goniometer. It is a set (pair) of inductors and the coupling is varied by mechanically moving one of the inductors. The ones I have seen have the movable inductor inside the fixed inductor and the movable inductor is rotated to vary the coupling. The movable inductor may have a linkage to a front-panel control unless it is a 'set and forget' part. It may or may not be what you are looking for.

73,

Bill KU8H

On 03/05/2016 02:33 PM, Rob roomberg@... [regenrx] wrote:
>
> re: What exactly were you looking for?
>
> PICTURES
>
> Without including all the emails... just sort of nutshell recap....
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25916. Re: [regenrx] Ant coupling to a Hartley regen mechanicals

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-06 02:49:29 UTC
From: les.au49@...
Topic: 25909 Message: 25916

Mailing "stuff" to Arnie.

Some years ago I sent various e-mails to Arnie - but somehow they never arrived in his 'in-box'.
After that I wrote - but the "standard" letters didn't arrive either.

More recently I WAS able to get thru to Arnie's in-box and soon I had a reply - here on Yahoo. Great!
Last week I posted a small packet to Arnie, and I'll advise here, on Yahoo Groups, when he gets it.

Prof Coro is such a well informed and helpful fellow that we are ALL poorer when the communication channel between his place and ours restricts our conversations and packages.

Les

25917. Re: [regenrx] Ant coupling to a Hartley regen mechanicals YES

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-06 03:11:05 UTC
From: Rob
Topic: 25909 Message: 25917

WOW
YES
now thats what I'm talking about!
This one picture shows enough to replicate such mechanism:

http://www.qsl.net/k7fj/UltimateCoupler.jpg

On 03/05/2016 03:45 PM, John Marshall johnmars@... [regenrx]
wrote:
>
> Rob,
>
> I haven't followed much of this thread and may be covering old ground
> but here's a web page showing a nice regen with variable link antenna
> coupling:
>
> < http://www.qsl.net/k7fj/Ultimate%20Regen.html >
>
> Hope this helps...
>
> John, KU4AF
> Pittsboro, NC
>
> On Mar 5, 2016, at 2:33 PM, Rob roomberg@... [regenrx] wrote:
>
> > re: What exactly were you looking for?
> >
> > PICTURES
> >
> > Without including all the emails... just sort of nutshell recap....
> > I may not get it all correct but I think it went like this:
> > Arnie posted a description of a mechanical linkage that worked for
> > receivers which gelled into ZL2JJ projects.... pointing at
> > http://www.w7ekb.com/glowbugs/rx/Regens/ZL2JJ/zl2jj_trf.htm
> >
> > My interest is in pictures of what Arnie was describing in his text in
> > emails.
> > Pictures of a schematic that mates with pictures of mechanical parts so
> > I can attempt to replicate known working circuits and the mechanical
> parts
> > that just do not exist in my modern world to reference.
> >
> > Arnie seems a bit techno crippled in that he can not simply snap a
> picture
> > and post it to the YAHOO reflector.

> > It would be much better for all of us trying to learn from great
> sources
> > like Arnie
> > if Arnie COULD take a picture.
> > I just bought a Android smartphone at Walmart for $20.
> > It has a great camera in it that takes up close circuit pictures
> just fine.
> > I'm thinking its time to mail Arnie a camera... or a dirt cheat
> > smartphone like this..... that he can
> > plug into his PC and post pictures on the web....
> > or at least email pictures to us that WE post on the web for him.
> > But then Arnie said the mail service is real slow and very unreliable
> > since I sent 7.16 resonators to him
> > at the same time I sent 7.16 resonators to UK.
> > Arnie didn't get his resonators while UK got them in 7 days.
> >
> > Can anyone recommend a way to get Arnie a camera so he can share his
> > radios ,schematics...pictures?
> >
> > ELECTRIC RADIO web page will sell back issues.
> > I guess I have to buy this issue to get a picture.
> >
> > ++
> > WOW !
> > I found it.... together , mixed into the stack of SPRAT Magazine, the
> > G QRP Club publication.
> > ELECTRIC RADIO
> > NUMBER 134
> > JUNE 2000
> > PAGES 20 TO 27
> > A WONDERFULLY WELL WRITTEN TECHNICAL ARTICLE ABOUT
> > REGENERATIVE RECEIVERS....THE 6J5 REGENERATIVE DETECTOR
> > CIRCUIT THAT THE AUTHOR USES WORKS VERY WELL, WITH
> > A NICE SMOOTH REGENERATION CONTROL ...
> > I tried it with a 6C4 and also with half of a 12AU7 * same as 6C4 *
> > then an attempt to use the 12AT7 / ECC81 did not worked so well
> > possible to it having a much higher MU * amplification factor "
> > May I suggest also that all of you download the ZL2JJ Regenerative
> > Receiver because it a pacesetter of all times, including the
> > magnificent mechanical construction... The one I built years ago
> > had newer , but similar vacuum tubes, but my very limited
> > mechanical abilities, and lack of a machine shop * the two combined
> > against me * made me dis-assemble my ZL2JJ for recycling some
> > of the hard to find parts....
> > 73 and DX
> > Arnie Coro
> > CO2KK
> > Host of Dxers Unlimited radio hobby program
> > Radio Havana Cuba
> > http://www.radiohc.cu

> >
> >
> >
> >
> >
> > ++
> > HOLA AMIGO!!!
> > Not that I remember... I saw that very clever variable coupling link
> > on an article in an old ELECTRIC RADIO US magazine, devoted
> > to vacuum tube equipment... The photos show how it is built for
> > a regenerative receiver that uses a 6J5 triode as the detector...
> > I do not have a scanner.. but maybe it would be possible to take
> > a photo of the article, if I can locate the ELECTRIC RADIO issue
> > in my not too well organized library !!!!
> > So far no message from the post office to go and pick up
> > something...
> > It seems likely that soon , after more than 50 years of INCOMMUNICADO
> > postal services, regular mail will be started between our two
> > nations...according to a recent joint press release by the Correos de
> > Cuba and the US Postal Service...
> > Up to now, all correspondence has to go routed through a third
> > country !!! And much of it is lost or pilfered in the case of
> parcels !!!
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> > 73 and DX
> > your friend in sunny La Habana
> > Arnie
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> > ++
> >
> >
> >>
> >>
> >> One of the most important aspects regarding how to make the
> >> incoming radio signal feed the detector circuit * in this case
> >> a regenerative detector with no RF amplifier * is to be able
> >> to provide a very precise degree of coupling to the detector
> >> coil... This is accomplished in one of my favorite regeneratives
> >> with a mechanical system , controlled from the front panel, that
> >> moves a single or two turns air wound coil that slides, more or less
> >> separated , from the grid tuned circuit coil...
> >> This is in essence an inductive plus a little capacitance coupling
> >> system, that has proven to be extremely effective in delivering to
> >> the detector the proper level required for good signals pickup...
> >> When using one RF stage ahead of the detector... in the untuned
> >> grounded grid configuration...one can install a good quality
> >> potentiometer to the cathode of the triode, and feed the signal
> >> via a capacitor to this resistive attenuator control !!!
> >> Likewise , when using a tuned RF amplifier, you can use a good
> >> quality carbon potentiometer between the antenna and the

> >> coupling link coil ... values between 1k and 10 k seem to work
> >> well....
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> >> Arnie Coro
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> >> An advocate of Regenerative and Regenerodyne radios !!!
> >
>
>

25918. Re: [regenrx] Ant coupling to a Hartley regen mechanicals More CORO

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-06 03:45:42 UTC
From: Rob
Topic: 25909 Message: 25918

RE: Prof Coro is such a well informed and helpful fellow that we are ALL
poorer when the communication channel between his place and ours
restricts our conversations and packages.

YES
I agree.

On 03/05/2016 09:49 PM, les.au49@... [regenrx] wrote:
>
> Mailing "stuff" to Arnie.
>
> Some years ago I sent various e-mails to Arnie - but somehow they
> never arrived in his 'in-box'.
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> poorer when the communication channel between his place and ours
> restricts our conversations and packages.
>
>
> Les
>
>

25919. Re: [regenrx] Ant coupling to a Hartley regen goniometer

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-06 04:00:18 UTC
From: Rob
Topic: 25909 Message: 25919

goniometer ? was that supposed to say VARIOMETER ?

I put the antenna linking picture here so I wouldn't lose them:
http://www.learnmorsecode.com/regen3/index.html

On 03/05/2016 08:50 PM, Bill Cromwell wrcromwell@gmail.com [regenrx] wrote:
>
> Hi Rob,
>
> You might also look for something called a goniometer. It is a set
> (pair) of inductors and the coupling is varied by mechanically moving
> one of the inductors. The ones I have seen have the movable inductor
> inside the fixed inductor and the movable inductor is rotated to vary
> the coupling. The movable inductor may have a linkage to a front-panel
> control unless it is a 'set and forget' part. It may or may not be what
> you are looking for.
>
> 73,
>
> Bill KU8H
>
> On 03/05/2016 02:33 PM, Rob roomberg@... [regenrx] wrote:
> >
> > re: What exactly were you looking for?
> >
> > PICTURES
> >
> > Without including all the emails... just sort of nutshell recap....
> > I may not get it all correct but I think it went like this:
> > Arnie posted a description of a mechanical linkage that worked for
> > receivers which gelled into ZL2JJ projects.... pointing at
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> >
> > My interest is in pictures of what Arnie was describing in his text in
> > emails.
> > Pictures of a schematic that mates with pictures of mechanical parts so
> > I can attempt to replicate known working circuits and the mechanical
> parts
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> > Arnie seems a bit techno crippled in that he can not simply snap a
> picture
> > and post it to the YAHOO reflector.
> > It would be much better for all of us trying to learn from great sources
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> > if Arnie COULD take a picture.
> > I just bought a Android smartphone at Walmart for $20.
> > It has a great camera in it that takes up close circuit pictures just
> > fine.
> > I'm thinking its time to mail Arnie a camera... or a dirt cheat
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> > But then Arnie said the mail service is real slow and very unreliable
> > since I sent 7.16 resonators to him
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> > REGENERATIVE RECEIVERS....THE 6J5 REGENERATIVE DETECTOR
> > CIRCUIT THAT THE AUTHOR USES WORKS VERY WELL, WITH
> > A NICE SMOOTH REGENERATION CONTROL ...
> > I tried it with a 6C4 and also with half of a 12AU7 * same as 6C4 *
> > then an attempt to use the 12AT7 / ECC81 did not worked so well
> > possible to it having a much higher MU * amplification factor "
> > May I suggest also that all of you download the ZL2JJ Regenerative
> > Receiver because it a pacesetter of all times, including the
> > magnificent mechanical construction... The one I built years ago
> > had newer , but similar vacuum tubes, but my very limited
> > mechanical abilities, and lack of a machine shop * the two combined
> > against me * made me dis-assemble my ZL2JJ for recycling some
> > of the hard to find parts....
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> > Not that I remember... I saw that very clever variable coupling link
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> > to vacuum tube equipment... The photos show how it is built for
> > a regenerative receiver that uses a 6J5 triode as the detector...
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> > > incoming radio signal feed the detector circuit * in this case
> > > a regenerative detector with no RF amplifier * is to be able
> > > to provide a very precise degree of coupling to the detector
> > > coil... This is accomplished in one of my favorite regeneratives
> > > with a mechanical system , controlled from the front panel, that
> > > moves a single or two turns air wound coil that slides, more or less
> > > separated , from the grid tuned circuit coil...
> > > This is in essence an inductive plus a little capacitance coupling
> > > system, that has proven to be extremely effective in delivering to
> > > the detector the proper level required for good signals pickup...
> > > When using one RF stage ahead of the detector... in the untuned
> > > grounded grid configuration...one can install a good quality
> > > potentiometer to the cathode of the triode, and feed the signal
> > > via a capacitor to this resistive attenuator control !!!
> > > Likewise , when using a tuned RF amplifier, you can use a good
> > > quality carbon potentiometer between the antenna and the
> > > coupling link coil ... values between 1k and 10 k seem to work
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> > > 73 and DX
> > > Arnie Coro
> > > CO2KK
> > > An advocate of Regenerative and Regenerodyne radios !!!
> > >
> > >

>
>

25920. Re: [regenrx] Ant coupling to a Hartley regen mechanicals

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-06 09:47:27 UTC
From: b_weeber@...
Topic: 25909 Message: 25920

You could use an old varable capacitor with reduction gear, to move the coil. If the plates have a shortcut, just pull them out and you have the complete mechanics already.

25921. Re: [regenrx] Ant coupling to a Hartley regen mechanicals etc

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-06 13:02:35 UTC
From: Prof. Arnaldo Coro Antich
Topic: 25909 Message: 25921

Brilliant idea amigos !!!
The Soviet VEF206 receivers have a variable capacitor with I think is
a 6 to 1 reduction ratio.... Ideal for that application
Old Barker and Williamson coils assemblies also had a mechanical
device to move a coupling link in and out of the center section of
a push pull coil..
You can also try to assemble a resistive attenuator pad , with switching
for minus 10 dB, minus 20 dB and minus 30 dB... In actual practice
I have found that the 4 settings are enough... One is bypass, no attenuation
number one minus 10 dB * the most frequently used while scanning
the short wave bands *, and with strong stations go to the minus 20 dB
setting...In my opinion it is always worthwhile to run a grounded grid
RF amplifier ahead of the regenerative detector, and use a very simple
RF attenuation circuit by putting a 5000 ohms variable , good quality
potentiometer between the cathode and ground... Feed the antenna
by means of a capacitor connected to the center of the potentiometer...
That will move the operating point of the triode tube, enough to provide
a certain degree of signal attenuation. BUT, I prefer to combine this
simple RF attenuator with the attenuator pad with the minus 10, minus
20 dB and minus 30 dB attenuation...
When properly adjusted for optimum operating parameters even the
most simple minimum parts count regenerative vacuum tube detector
provides a truly amazing performance... !!!
ADDENDA> A further comment...DC , regulated DC on the filaments
of the detector and the first audio amplifier tube are ESSENTIAL,,,
because they reduce HUM to a minimum and contribute to stability
too...
Second comment.... Some very good tubes are able to provide very
nice reception when you run very low plate and screen voltages...
My practical experience is that changing the plate voltage , and the
screen voltage very carefully further contributes to detector stability
and thus much better CW and SSB reception, as well as reception
of PSK31 and MFSK16 digital modes...
73 and DX
Arnie Coro
CO2KK

On 03/06/2016 04:47 AM, b_weeber@... [regenrx] wrote:
>
>
> You could use an old varable capacitor with reduction gear, to move
> the coil. If the plates have a shortcut, just pull them out and you
> have the complete mechanics already.
>
>

25922. Re: [regenrx] Ant coupling to a Hartley regen goniometer

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-06 15:03:45 UTC
From: Bill Cromwell
Topic: 25909 Message: 25922

Hi Rob,

Nope. Goniometer.

73,

Bill KU8H

On 03/05/2016 11:00 PM, Rob roomberg@... [regenrx] wrote:
>
>
> goniometer ? was that supposed to say VARIOMETER ?
>
>
> I put the antenna linking picture here so I wouldn't lose them:
> http://www.learnmorsecode.com/regen3/index.html
>
>

25923. Re: [regenrx] Ant coupling to a Hartley regen RADIOgoniometer

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-06 16:44:50 UTC
From: Rob
Topic: 25909 Message: 25923

Found it.... radiogoniometer

https://en.wikipedia.org/wiki/Bellini%E2%80%93Tosi_direction_finder

On 03/06/2016 10:03 AM, Bill Cromwell wrcromwell@... [regenrx] wrote:
>
> Hi Rob,
>
> Nope. Goniometer.
>
> 73,
>
> Bill KU8H
>
> On 03/05/2016 11:00 PM, Rob roomberg@... [regenrx] wrote:
> >
> >
> > goniometer ? was that supposed to say VARIOMETER ?
> >
> >
> > I put the antenna linking picture here so I wouldn't lose them:
> > http://www.learnmorsecode.com/regen3/index.html
> >
> >
>
>

25924. Re: [regenrx] Ant coupling to a Hartley regen RADIOgoniometer

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-07 00:08:36 UTC
From: harmonicworkshop@...
Topic: 25909 Message: 25924

Mike, WU2D, built a very nice 40m "Novice Special" with a moving antenna link and Faraday shield. Have used the moving link in a regen build and like Vaughn's write up about his "Ultimate", it seems to be an important improvment- especially if no RF stage is used. It may be posted in the files section sometime around 2010, or he has a youtoob covering its build and operation, IIRC...
-Geary

25925. Re: [regenrx] Ant coupling to a Hartley regen RADIOgoniometer

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-07 00:23:36 UTC
From: harmonicworkshop@...
Topic: 25909 Message: 25925

The youtoob link is- MIKROWAVE1, Regenerative Two-Tube 40Meter Receiver. Neat 2 part video.

25926. Re: [regenrx] Ant coupling to a Hartley regen RADIOgoniometer

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-07 00:40:22 UTC
From: b_weeber@...
Topic: 25909 Message: 25926

It's on youtube:
https://youtu.be/DVKBKCkmrWI?t=132 https://youtu.be/DVKBKCkmrWI?t=132

Some time ago i tried a similar faraday shield combined with a fixed coil. It eliminates the capacitive coupling and reduces a lot of influences between antenna and preamplifier on the tank circuit.

25927. Re: [regenrx] Ant coupling to a Hartley regen faraday shield between antenna link

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-07 03:14:14 UTC
From: Rob
Topic: 25909 Message: 25927

Aluminum comb... faraday shield. Learning something new everyday.

Thank you for the video link.

http://www.learnmorsecode.com/regen3/liftlink.jpg

On 03/06/2016 07:40 PM, b_weeber@... [regenrx] wrote:
>
> It's on youtube:
>
> https://youtu.be/DVKBKCkmrWI?t=132
>
> Some time ago i tried a similar faraday shield combined with a fixed
> coil. It eliminates the capacitive coupling and reduces a lot of
> influences between antenna and preamplifier on the tank circuit.
>

25928. Re: [regenrx] Ant coupling to a Hartley regen mechanicals

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-07 18:01:27 UTC
From: b_weeber@...
Topic: 25909 Message: 25928

Here is another example:
https://groups.yahoo.com/neo/groups/regenrx/files/Exchange/converter_with_faraday_shield.pdf https://groups.yahoo.com/neo/groups/regenrx/files/Exchange/converter_with_faraday_shield.pdf
The faraday shield is constructed by thin copper wires.
What is the advantage, less eddy currents / losses?

25929. Re: [regenrx] Ant coupling to a Hartley regen mechanicals

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-08 15:48:22 UTC
From: Michael
Topic: 25909 Message: 25929

This is an interesting variant. I have used a variometer
with similar effect, however without shielding. I would
think that many attenuator designs feeding a grounded-grid
or grounded-gate RF amp would work well, even better if the
RF amp is shielded. I would start with the time-proven
Newkirk design. Even KISSing with a potentiometer at the
RF input works quite well to optimise the regen response.

My design preference (thus far) would be :
RF attenuator > GG-RFamp > Regen det (or Q-multiplier)
> AF filter (passive or active) > low-noise AF amp.
RF stages can be tube or semiconductor, AF stages
likewise, but I am happy with hybrids using low-noise
silicon AF options :-)

Nowadays, ambient noise is more determinant than
design optimisation. So a screened loop antenna
can be the most significant part of a regen...

Michael

On 07.03.16 18:01, b_weeber@... [regenrx] wrote:
> Here is another example:
> https://groups.yahoo.com/neo/groups/regenrx/files/Exchange/converter_with_faraday_shield
.pdf
>
> The faraday shield is constructed by thin copper wires.
> What is the advantage, less eddy currents / losses?

25930. Re: [regenrx] Ant coupling to a Hartley regen mechanicals

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-08 19:49:22 UTC
From: harmonicworkshop@...
Topic: 25909 Message: 25930

How about GG RF Amp coupled to tank by moving coil and regen detector followed by AF string?

Weak signals make it in through a low noise, low gain GG RF amp run wide open (6GK5 or cascoded 6ES8), then attenuation occurs before the detector in a shielded, movable link tank coupler.

Thoughts please?

-geary

25931. Re: [regenrx] Ant coupling to a Hartley regen mechanicals

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-08 21:12:47 UTC
From: Michael
Topic: 25909 Message: 25931

Certainly worth a try. I suspect adjusting the moving coil would
require retuning and tweaking the regen, but there might
be an optimal setting for a band segment. An attenuator pot
between aerial and GG RF amp might be indicated to tame
strong signals.

Michael

On 08.03.16 19:49, harmonicworkshop@... [regenrx] wrote:

> How about GG RF Amp coupled to tank by moving coil and regen detector
> followed by AF string?
>
> Weak signals make it in through a low noise, low gain GG RF amp run wide
> open (6GK5 or cascoded 6ES8), then attenuation occurs before the
> detector in a shielded, movable link tank coupler.
>
> Thoughts please?
>
> -geary

25932. Re: [regenrx] Ant coupling to a Hartley regen mechanicals

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-11 02:48:23 UTC
From: david.newkirk@...
Topic: 25909 Message: 25932

Geary wrote:

> How about GG RF Amp coupled to tank by moving coil and regen detector followed by AF string?
>
> Weak signals make it in through a low noise, low gain GG RF amp run wide open (6GK5 or cascoded 6ES8),
> then attenuation occurs before the detector in a shielded, movable link tank coupler.
>
> Thoughts please?

I think that the better solution is variable or fixed attenuation installed _ahead_ of the grounded-grid amplifier, not after.

The grounded-grid amp--one tube only; the gain of a cascoded or cascaded pair is not needed and is actually undesirable) gives you several very desirable characteristics:

1 Low, predictable, mainly resistive input impedance (as a first-order approximation, 1/transconductance, which for the 6GK5 (transconductance, 15 mS) equates to an input impedance of 67 ohms--a good match for a 50- to 75-ohm antenna system). This lets you design and install--between antenna and grounded-grid stage--known values of frequency-independent attenuation that can be easily implemented with carbon-film resistors. Or play a bit looser with impedance matching and install a low-value potentiometer--say, 500 ohms--for continuously variable attenuation.

2 Good buffering of the detector from impedance variations, including attenuation adjustments, on the low-impedance antenna-input line. Adjustable coupling right at the detector tuned circuit via affect the detector in profound ways _and_ give results that will vary with frequency.

3 Good suppression of feedthrough from detector to antenna.

Varying the detector's signal diet by inserting attenuation and/or filtering _ahead_ of the grounded-grid amplifier also makes the amplifier more overload-resistant in a way that adding post-amplifier attenuation cannot. Assuming a well-behaved amplifier, every dB of attenuation added ahead of the amplifier decreases 2nd-order intermodulation distortion products in that amplifier by 2 dB, and third-order IMD products by 3 dB.

The circuits in my page at http://dpnwritings.nfshost.com/ej/wr/ illustrate this technique, which also works well at IF. At 40 meters I'm using about 18 dB of attenuation between the antenna and grounded-grid stage such that the antenna-system noise floor _just_, but clearly, overrides the receiver's internal noise floor. The receiver is so resistant to pulling and overload by strong signals that I may not have to touch its REGENERATION control across multiple operating sessions.

Best regards,

Dave
amateur radio W9BRD
radio pages: David Newkirk Writings: Enjoying Radio http://dpnwritings.nfshost.com/ej/

http://dpnwritings.nfshost.com/ej/

David Newkirk Writings: Enjoying Radio http://dpnwritings.nfshost.com/ej/ What's New at Enjoying Radio Amateur Radio W9BRD Then and Now The First W9VES Amateur Radio W9VES I (1935–1969) and W9VES II (1996–2014) The...

View on dpnwritings.nfshost.com http://dpnwritings.nfshost.com/ej/
Preview by Yahoo

25933. Re: [regenrx] Ant coupling to a Hartley regen mechanicals

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-11 03:07:41 UTC
From: harmonicworkshop@...
Topic: 25909 Message: 25933

Got it. Thank you David.
geary

25934. Re: Ant coupling to a Hartley regen mechanicals

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-11 16:32:35 UTC
From: Paul Ross
Topic: 25909 Message: 25934

The MFJ 8100 uses an attenuator at the antenna, followed by a grounded emitter, then the detector. Seems to work well.

73 /paul W3FIS

25935. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-11 22:42:01 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 25935

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Leonard's Stuff/Mk.14 Mod 5.bmp
Uploaded by : leonardmeek <lemeek@...>
Description : Update

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Leonard%27s%20Stuff/Mk.14%20Mod%205.bmp

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

leonardmeek <lemeek@...>

25936. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-11 22:42:33 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 25936

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Leonard's Stuff/Mk 15 Mod 3.bmp
Uploaded by : leonardmeek <lemeek@...>
Description : Update

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Leonard%27s%20Stuff/Mk%2015%20Mod%203.bmp

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

leonardmeek <lemeek@...>

25937. Ml.14 and 15

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-11 22:59:25 UTC
From: Leonard Meek
Topic: 25937 Message: 25937

I just uploaded the schemo's of my Mk.14 & 15. As usual, I don't bother with coil data because that can be determined by the selection of the coil/varicap combo. For the faint of heart I've grounded the chassis, but that only works if the set is plugged into a properly grounded outlet. While it's not foolproof, it shoukd be safe enough for non-fools. I tried to come up with a circuit that would use a SPST relay effectively but it obviously came up short. Also, since the AC switch is on the audio gain control, I put it as close to ground as I could to reduce hum. The only hum I get now is from the output tube being powered from the filter input. I can live with it because I can hardly hear it.

Leonard

25938. Re: [regenrx] Ml.14 and 15

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-12 00:00:49 UTC
From: Prof. Arnaldo Coro Antich
Topic: 25937 Message: 25938

Dear amigo Yahoo is not working here.
Could you send the new schematics to
my coro at enet dot cu address ?
will very much like to see them
73 and DX
Arnie
CO2KK

On 11/03/16 17:59, 'Leonard Meek' lemeek@... [regenrx] wrote:
> I just uploaded the schemo's of my Mk.14 & 15. As usual, I don't bother with
> coil data because that can be determined by the selection of the
> coil/varicap combo. For the faint of heart I've grounded the chassis, but
> that only works if the set is plugged into a properly grounded outlet. While
> it's not foolproof, it shoukd be safe enough for non-fools. I tried to come
> up with a circuit that would use a SPST relay effectively but it obviously
> came up short. Also, since the AC switch is on the audio gain control, I put
> it as close to ground as I could to reduce hum. The only hum I get now is
> from the output tube being powered from the filter input. I can live with it
> because I can hardly hear it.
>
> Leonard
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> "In the interest of Regenerating radio's lost art of Regeneration"
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> Yahoo Groups Links
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25941. 6SL7 Regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-12 01:06:28 UTC
From: nzerowva@...
Topic: 25941 Message: 25941

Added some photos. Homebrewed another regen, this time tried a tube. Works good, buch for SSB and CW, transistors behave better, but the triode seems to be better at detecting AM, although it does load the tuned circuit a lot more. Not sure if its the extra tickler turns or maybe lower input impedance doing that.

I used to not like to use those superhetrodyne variable capacitors because of the extra gang, but I am finding out you can use it to your advantage by making the small section tune the SW bands, and using the large section to tune the BCB plug in coil. Works pretty good.

25943. Re: [regenrx] Ml.14 and 15

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-12 02:30:34 UTC
From: Leonard Meek
Topic: 25937 Message: 25943
Attachments: 2 described; binary payloads are missing from this source WARC

----- Original Message -----
From: "'Prof. Arnaldo Coro Antich' coro@enet.cu [regenrx]" <regenrx@yahoogroups.com>
To: <regenrx@yahoogroups.com>
Sent: Friday, March 11, 2016 2:00 PM
Subject: Re: [regenrx] Ml.14 and 15

> Dear amigo Yahoo is not working here.
> Could you send the new schematics to
> my coro at enet dot cu address ?
> will very much like to see them
> 73 and DX
> Arnie
> CO2KK
>

25944. RE: [regenrx] 6SL7 Regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-12 02:50:07 UTC
From: Hubert Miller
Topic: 25941 Message: 25944

I am wondering about substituting FETs in some of my tubed regens. I kind of wish you would define a little more specifically what you

mean by “behave better” or “better at detecting AM”.
I assume “behave” might mean stabililty.

I’d guess the “better at AM” means more audio recovered.

About the tuned circuit loading, i’d guess that means skirt selectivity, meaning more effect of strong signals spaced from the one you’re

tuned to.

-Hue Miller

>From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]

Added some photos. Homebrewed another regen, this time tried a tube. Works good, buch for SSB and CW, transistors behave better, but the triode seems to be better at detecting AM, although it does load the tuned circuit a lot more. Not sure if its the extra tickler turns or maybe lower input impedance doing that.

I used to not like to use those superhetrodyne variable capacitors because of the extra gang, but I am finding out you can use it to your advantage by making the small section tune the SW bands, and using the large section to tune the BCB plug in coil. Works pretty good.._,_.___

_____

Posted by: nzerowva@...

25945. RE: [regenrx] 6SL7 Regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-12 02:56:17 UTC
From: Hubert Miller
Topic: 25941 Message: 25945

Some of those old classic project articles used multi-pin coil sockets with wiring inside to select the section of the variable, either the large

section or small section, as you point out, for the different freq regions.

-Hue

>I used to not like to use those superhetrodyne variable capacitors because of the extra gang, but I am finding out you can use it to your advantage by making the small section tune the SW bands, and using the large section to tune the BCB plug in coil. Works pretty good.,_.___ nzerowva@yahoo.com

25946. RE: [regenrx] 6SL7 Regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-12 03:20:25 UTC
From: nzerowva@...
Topic: 25941 Message: 25946

Its hard to explain, but the actual AM detection seems to be better in that the gain acts like it is higher and in a broader region just before oscillation. And seems just the opposite when in the oscillating condition (the FET has more gain). Maybe it is just me.

25947. Re: 6SL7 Regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-12 03:26:38 UTC
From: nzerowva@...
Topic: 25941 Message: 25947

Yes, and I like being able to tune the AM BCB with only one coil.

25948. RE: [regenrx] 6SL7 Regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-12 11:44:37 UTC
From: david.newkirk@...
Topic: 25941 Message: 25948

> Its hard to explain, but the actual AM detection seems to be better in that the gain acts
> like it is higher and in a broader region just before oscillation. And seems just the opposite
> when in the oscillating condition (the FET has more gain). Maybe it is just me.

That's quite possible, as vacuum tubes and FETs--in this case, JFETs, I think, which will behave somewhat differently than MOSFETs because there can be no gate-source conduction in a MOSFET without destroying the device--are very, very different devices. The current flow in both is controlled by the electric field surrounding its control element (grid or gate), but once there's conduction through that control element their behavior can be expected to diverge.

Best regards,

Dave
amateur radio W9BRD

25949. RE: [regenrx] Ml.14 and 15

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-12 14:44:45 UTC
From: Larry
Topic: 25937 Message: 25949
Attachments: 2 described; binary payloads are missing from this source WARC

Mighty fine, Leonard! Magnificent!

Larry

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Friday, March 11, 2016 9:31 PM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Ml.14 and 15

----- Original Message -----

From: "'Prof. Arnaldo Coro Antich' coro@... [regenrx]"
<regenrx@yahoogroups.com>

To: <regenrx@yahoogroups.com>

Sent: Friday, March 11, 2016 2:00 PM

Subject: Re: [regenrx] Ml.14 and 15

> Dear amigo Yahoo is not working here.
> Could you send the new schematics to
> my coro at enet dot cu address ?
> will very much like to see them
> 73 and DX
> Arnie
> CO2KK
>

25950. Re: [regenrx] Ml.14 and 15

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-12 15:05:20 UTC
From: Prof. Arnaldo Coro Antich
Topic: 25937 Message: 25950
Attachments: 2 described; binary payloads are missing from this source WARC

Dear amigos :
Question:
Would it not be better to have the 500 k volume control
at the grid of the first 12AX7 triode ?
Or should it be placed between the first and the second triode,
replacing the 470 k grid resistor ?
There is A LOT OF GAIN available from those two
triodes 12AX7 feeding into the 50C5
My favorites audio tail ends are two:
One ? a la Collins ? a copy of the audio section of the
75A1 receiver
Two the classic ECL82/6BM8 that works very well too
Of course that there are many possible circuit diagrams
for the audio tail of a vacuum tubes regenerative...
as virtually any of the many tubes available can be used.
The power for those audio tails, and the regenerative
detector etc, can be easily be produced by two back
to back 120 /12.6 volts transformers... and you will
be protected from possible AC power line shocks that
may come from using the power line without a
transformer !!!

On 12/03/16 09:44, 'Larry' lbeaty@... [regenrx] wrote:
>
>
> Mighty fine, Leonard! Magnificent!
>
> Larry
>
> *From:*regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
> *Sent:* Friday, March 11, 2016 9:31 PM
> *To:* regenrx@yahoogroups.com
> *Subject:* Re: [regenrx] Ml.14 and 15
>
> ----- Original Message -----
>
> From: "'Prof. Arnaldo Coro Antich' coro@... <mailto:coro@...>
> [regenrx]" <regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>>
>
> To: <regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>>
>
> Sent: Friday, March 11, 2016 2:00 PM
>
> Subject: Re: [regenrx] Ml.14 and 15

>
> > Dear amigo Yahoo is not working here.
> > Could you send the new schematics to
> > my coro at enet dot cu address ?
> > will very much like to see them
> > 73 and DX
> > Arnie
> > CO2KK
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25951. Please help ID this crystal radio

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-12 16:10:55 UTC
From: danyoder.cs@...
Topic: 25951 Message: 25951
Attachments: 3 described; binary payloads are missing from this source WARC

Hi all,
I just bought this old crystal set on Ebay Can anyone tell me what it is called, when it was popular and why does it have two tuning coils? I bought the one without the black knobs.

Thanks Dan W3DKY

25952. RE: About regenerative with ceramic resonators !!!

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-12 17:05:17 UTC
From: Prof. Arnaldo Coro Antich
Topic: 25952 Message: 25952

Will amigo KB3BYT please send mail to Arnie Coro
to:
arnaldo.coro@...
Thanks a lot
Arnie

25953. TRF Coils and Caps

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-12 17:16:08 UTC
From: danyoder.cs@...
Topic: 25953 Message: 25953
Attachments: 5 described; binary payloads are missing from this source WARC

Hi All,
I just purchased this set of Fada Neutradyne caps and coils. Can someone tell me which would be the best schematic to use these in.
Thanks

25954. RE: KB3BYT and ceramic resonators for 40 meters band receiver project

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-12 17:22:20 UTC
From: Prof. Arnaldo Coro Antich
Topic: 25954 Message: 25954

To amigo Bob
Please contact Arnie CO2KK via
arnaldo.coro@...
Now working on the ceramic resonators 40 meters
band project
73 and DX
Arnie Coro
CO2KK

25955. Re: [regenrx] RE: KB3BYT and ceramic resonators for 40 meters band receiver project

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-12 17:47:53 UTC
From: Michael
Topic: 25954 Message: 25955

Arnie, please report back to the group
on your 40m ceramic resonator build.

I am collecting components and intend to replicate -
thanks to Rob.

Michael
UK

On 12.03.16, 'Prof. Arnaldo Coro Antich' coro@... [regenrx] wrote:

> Now working on the ceramic resonators 40 meters band project

25956. Re: [regenrx] Ml.14 and 15

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-12 17:50:24 UTC
From: Leonard Meek
Topic: 25937 Message: 25956
Attachments: 2 described; binary payloads are missing from this source WARC

I think the high gain of the 12AX7 makes it more likely to pick up hum, especially if the AC power switch is mounted on the audio gain control. Putting it in the last stage seems to help a lot. I try to keep the high gain circuit leads as short as posible. Also, putting the power switch in the ground side of the circuit helps too. I suspect that's why so many AA5 receivers have the power switch on the ground side of the circuit.

I favor the cathode control to control the RF amp gain because the gain control can be mounted anywhere. The antenna input control has to be mounted as close to the RF amp circuit as posible, with an extended shaft or sheilded leads.

My safety relay circuit is not totally practical because it would not work with a GFI. The ground current would trip the breaker. I never liked the idea of hooking up two transformers back to back to isolate the circuit from the AC line. I have isolation transformers for that purpose, one 5A in my bench and a 15KVA supplying most of my other receivers. I find them more useful for cutting down line noise. I found this out with my R-649A. It had an anoying hum until I put it on a small isolation transformer. But even with a transformer, 120 volts is still 120 volts. I think the best safety device for electrical work is a healthy respect for electricity, not fear.

Leonard
----- Original Message -----
From: 'Prof. Arnaldo Coro Antich' coro@enet.cu [regenrx]
To: regenrx@yahoogroups.com
Sent: Saturday, March 12, 2016 5:05 AM
Subject: Re: [regenrx] Ml.14 and 15

Dear amigos :
Question:
Would it not be better to have the 500 k volume control
at the grid of the first 12AX7 triode ?
Or should it be placed between the first and the second triode, replacing the 470 k grid resistor ?
There is A LOT OF GAIN available from those two
triodes 12AX7 feeding into the 50C5
My favorites audio tail ends are two:
One ¨ a la Collins ¨ a copy of the audio section of the
75A1 receiver
Two the classic ECL82/6BM8 that works very well too
Of course that there are many possible circuit diagrams
for the audio tail of a vacuum tubes regenerative...
as virtually any of the many tubes available can be used.
The power for those audio tails, and the regenerative
detector etc, can be easily be produced by two back
to back 120 /12.6 volts transformers... and you will
be protected from possible AC power line shocks that

may come from using the power line without a
transformer !!!

On 12/03/16 09:44, 'Larry' lbeaty@windstream.net [regenrx] wrote:

Mighty fine, Leonard! Magnificent!

Larry

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Friday, March 11, 2016 9:31 PM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Ml.14 and 15

----- Original Message -----

From: "'Prof. Arnaldo Coro Antich' coro@... [regenrx]" <regenrx@yahoogroups.com>

To: <regenrx@yahoogroups.com>

Sent: Friday, March 11, 2016 2:00 PM

Subject: Re: [regenrx] Ml.14 and 15

> Dear amigo Yahoo is not working here.
> Could you send the new schematics to
> my coro at enet dot cu address ?
> will very much like to see them
> 73 and DX
> Arnie
> CO2KK
>

25957. Re: [regenrx] Ml.14 and 15

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-12 18:13:16 UTC
From: Bill Cromwell
Topic: 25937 Message: 25957

Hi Leonard,

The question of the deadly AC/DC or not has been brought up many times on many radio lists. I am pretty much in agreement with *your* view but would like to add -

If you are afraid of the electricity you should just stay away from it. Being fearful will probably get you hurt or worse. Healthy respect and using safety procedures will allow us to enjoy. There is no room when working with the power line for laying 'hot' chassis on your lap or just grabbing it any which way. It's a whole other ballgame. Some of us were fortunate to have good coaches in that kind of ballgame when were young. The rest should limit themselves to single 9 volt batteries (not series stacks). Even 12 volt car batteries can hurt you very badly.

Laying back in the tub of hot water while listening to the AA5 on the edge of the tub - *NOT*.

73,

Bill KU8H

On 03/12/2016 12:50 PM, 'Leonard Meek' lemeek@... [regenrx] wrote:
>
>
> My safety relay circuit is not totally practical because it would not
> work with a GFI. The ground current would trip the breaker. I never
> liked the idea of hooking up two transformers back to back to isolate
> the circuit from the AC line. I have isolation transformers for that
> purpose, one 5A in my bench and a 15KVA supplying most of my other
> receivers. I find them more useful for cutting down line noise. I
> found this out with my R-649A. It had an anoying hum until I put it on
> a small isolation transformer. But even with a transformer, 120 volts
> is still 120 volts. I think the best safety device for electrical work
> is a healthy respect for electricity, not fear.
> Leonard
>

25958. Re: [regenrx] Ml.14 and 15

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-12 18:31:19 UTC
From: Michael
Topic: 25937 Message: 25958

Leonard,

Beautifully presented schematic! The old world used to
prioritise top-edge HT line, bottom-edge ground line
and left-to-right signal path. Many new-age schematics
follow an inscrutably superior neo-logic, which confounds me...
My Dad was one of the youngest licenced hams, worked
in hush-hush WW2 research, built one of the earliest
Nipkow TV receivers (which should never have been junked).
So I guess I am in genetic synaptic brain-warp...

If I had the bits, I would love to replicate your designs.
I am slowly collecting old AM radios, so perchance, one day...

Michael

25959. Re: [regenrx] Ml.14 and 15

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-12 18:57:24 UTC
From: Leonard Meek
Topic: 25937 Message: 25959

Big DITTO there, Bill.

Leonard

----- Original Message -----
From: "Bill Cromwell wrcromwell@... [regenrx]"
<regenrx@yahoogroups.com>
To: <regenrx@yahoogroups.com>
Sent: Saturday, March 12, 2016 8:13 AM
Subject: Re: [regenrx] Ml.14 and 15

> Hi Leonard,
>
> The question of the deadly AC/DC or not has been brought up many times
> on many radio lists. I am pretty much in agreement with *your* view but
> would like to add -
>
> If you are afraid of the electricity you should just stay away from it.
> Being fearful will probably get you hurt or worse. Healthy respect and
> using safety procedures will allow us to enjoy. There is no room when
> working with the power line for laying 'hot' chassis on your lap or just
> grabbing it any which way. It's a whole other ballgame. Some of us were
> fortunate to have good coaches in that kind of ballgame when were young.
> The rest should limit themselves to single 9 volt batteries (not series
> stacks). Even 12 volt car batteries can hurt you very badly.
>
> Laying back in the tub of hot water while listening to the AA5 on the
> edge of the tub - *NOT*.
>
> 73,
>
> Bill KU8H
>
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>
> On 03/12/2016 12:50 PM, 'Leonard Meek' lemeek@... [regenrx]
> wrote:
>>
>>
>> My safety relay circuit is not totally practical because it would not
>> work with a GFI. The ground current would trip the breaker. I never
>> liked the idea of hooking up two transformers back to back to isolate
>> the circuit from the AC line. I have isolation transformers for that
>> purpose, one 5A in my bench and a 15KVA supplying most of my other
>> receivers. I find them more useful for cutting down line noise. I
>> found this out with my R-649A. It had an anoying hum until I put it on

>> a small isolation transformer. But even with a transformer, 120 volts
>> is still 120 volts. I think the best safety device for electrical work
>> is a healthy respect for electricity, not fear.
>> Leonard
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> "In the interest of Regenerating radio's lost art of Regeneration"
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> Yahoo Groups Links
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25960. Re: [regenrx] Ml.14 and 15

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-12 19:12:38 UTC
From: Leonard Meek
Topic: 25937 Message: 25960

One thing I forgot to mention, the cascode RF amp I use on many of my projects. It is supposed to be less noisy than a pentode amp, but that may be lost on my set because of other problems. Also, it has the feature of a grounded grid with added gain. In this case the calculated gain is about 30. I've also tried a cathode coupled RF amp but results were not sensational. Another thing I didn't mention was that the Mk.14 uses plugin coils. I wound two sets of 4 pin coils for 7 bands, which is why the Hartley detector is not used. The Mk.15 uses a set of slug tuned coils I found in my junk box. There was just one set of coils so I had to use an untuned RF stage. Meanwhile, fun continues non-stop.

Leonard

----- Original Message -----
From: "Michael michael.setaazul@... [regenrx]"
<regenrx@yahoogroups.com>
To: <regenrx@yahoogroups.com>
Sent: Saturday, March 12, 2016 8:31 AM
Subject: Re: [regenrx] Ml.14 and 15

> Leonard,
>
> Beautifully presented schematic! The old world used to
> prioritise top-edge HT line, bottom-edge ground line
> and left-to-right signal path. Many new-age schematics
> follow an inscrutably superior neo-logic, which confounds me...
> My Dad was one of the youngest licenced hams, worked
> in hush-hush WW2 research, built one of the earliest
> Nipkow TV receivers (which should never have been junked).
> So I guess I am in genetic synaptic brain-warp...
>
> If I had the bits, I would love to replicate your designs.
> I am slowly collecting old AM radios, so perchance, one day...
>
> Michael
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> "In the interest of Regenerating radio's lost art of Regeneration"
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> Yahoo Groups Links

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25961. Re: [regenrx] MI.14 and 15

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-12 19:43:46 UTC
From: Jim Simmons
Topic: 25937 Message: 25961

Michael,

I'm with you on the schematics. Back then they were laid out like railroad tracks (that's why the power lines are called "rails"). If you observe, the B+ and ground lines are the rails and the circuits between them are the ties. You can consider the signal path as the third rail. The train goes down the track from left to right (East to West). It makes sense, and once you learn it reading schematics laid out in that form are simple. Even complex circuits are easy to read and can be taken in as a whole in a glance. I'm an old fart and I built my first crystal set back in 1947. Electronics was my working career and I taught it for close to 30 years during that career.

Jim ~ N5MSJ

On 3/12/2016 12:31 PM, Michael michael.setaazul@...
[regenrx] wrote:
> Leonard,
>
> Beautifully presented schematic! The old world used to
> prioritise top-edge HT line, bottom-edge ground line
> and left-to-right signal path. Many new-age schematics
> follow an inscrutably superior neo-logic, which confounds me...
> My Dad was one of the youngest licenced hams, worked
> in hush-hush WW2 research, built one of the earliest
> Nipkow TV receivers (which should never have been junked).
> So I guess I am in genetic synaptic brain-warp...
>
> If I had the bits, I would love to replicate your designs.
> I am slowly collecting old AM radios, so perchance, one day...
>
> Michael
>
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> "In the interest of Regenerating radio's lost art of Regeneration"
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> Yahoo Groups Links
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25962. Re: [regenrx] Ml.14 and 15

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-12 19:47:10 UTC
From: Jim Simmons
Topic: 25937 Message: 25962

Darnit, I meant from West to East. (Must be old age creeping in).

On 3/12/2016 1:43 PM, Jim Simmons orion@... [regenrx] wrote:
> Michael,
>
> I'm with you on the schematics. Back then they were laid out like
> railroad tracks (that's why the power lines are called "rails"). If you
> observe, the B+ and ground lines are the rails and the circuits between
> them are the ties. You can consider the signal path as the third rail.
> The train goes down the track from left to right (East to West). It
> makes sense, and once you learn it reading schematics laid out in that
> form are simple. Even complex circuits are easy to read and can be taken
> in as a whole in a glance. I'm an old fart and I built my first crystal
> set back in 1947. Electronics was my working career and I taught it for
> close to 30 years during that career.
>
> Jim ~ N5MSJ
>
> On 3/12/2016 12:31 PM, Michael michael.setaazul@...
> [regenrx] wrote:
>> Leonard,
>>
>> Beautifully presented schematic! The old world used to
>> prioritise top-edge HT line, bottom-edge ground line
>> and left-to-right signal path. Many new-age schematics
>> follow an inscrutably superior neo-logic, which confounds me...
>> My Dad was one of the youngest licenced hams, worked
>> in hush-hush WW2 research, built one of the earliest
>> Nipkow TV receivers (which should never have been junked).
>> So I guess I am in genetic synaptic brain-warp...
>>
>> If I had the bits, I would love to replicate your designs.
>> I am slowly collecting old AM radios, so perchance, one day...
>>
>> Michael
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>> "In the interest of Regenerating radio's lost art of Regeneration"
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25963. Re: [regenrx] Ml.14 and 15

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-12 20:17:03 UTC
From: Leonard Meek
Topic: 25937 Message: 25963

I agree, Jim. I built my first Xtal set in 1942. Power at the bottom of the diagram was what I lesrned first from reading old Audel's manuals. I can certainly see the practicality of the "rail" system, and I notice it's more prominemt in SS circuits. Old habits are hard to bresk, but I'll try to force myself to comply in the future.

Leonard

----- Original Message -----
From: "Jim Simmons orion@... [regenrx]" <regenrx@yahoogroups.com>
To: <regenrx@yahoogroups.com>
Sent: Saturday, March 12, 2016 9:43 AM
Subject: Re: [regenrx] Ml.14 and 15

> Michael,
>
> I'm with you on the schematics. Back then they were laid out like
> railroad tracks (that's why the power lines are called "rails"). If you
> observe, the B+ and ground lines are the rails and the circuits between
> them are the ties. You can consider the signal path as the third rail.
> The train goes down the track from left to right (East to West). It
> makes sense, and once you learn it reading schematics laid out in that
> form are simple. Even complex circuits are easy to read and can be taken
> in as a whole in a glance. I'm an old fart and I built my first crystal
> set back in 1947. Electronics was my working career and I taught it for
> close to 30 years during that career.
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> Jim ~ N5MSJ
>
> On 3/12/2016 12:31 PM, Michael michael.setaazul@...
> [regenrx] wrote:
>> Leonard,
>>
>> Beautifully presented schematic! The old world used to
>> prioritise top-edge HT line, bottom-edge ground line
>> and left-to-right signal path. Many new-age schematics
>> follow an inscrutably superior neo-logic, which confounds me...
>> My Dad was one of the youngest licenced hams, worked
>> in hush-hush WW2 research, built one of the earliest
>> Nipkow TV receivers (which should never have been junked).
>> So I guess I am in genetic synaptic brain-warp...
>>
>> If I had the bits, I would love to replicate your designs.
>> I am slowly collecting old AM radios, so perchance, one day...
>>
>> Michael

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25964. Re: [regenrx] Ml.14 and 15

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-12 20:18:43 UTC
From: Leonard Meek
Topic: 25937 Message: 25964

How about "from port to starboard"

Leonard

----- Original Message -----
From: "Jim Simmons orion@... [regenrx]" <regenrx@yahoogroups.com>
To: <regenrx@yahoogroups.com>
Sent: Saturday, March 12, 2016 9:47 AM
Subject: Re: [regenrx] Ml.14 and 15

> Darnit, I meant from West to East. (Must be old age creeping in).
>
> On 3/12/2016 1:43 PM, Jim Simmons orion@... [regenrx] wrote:
>> Michael,
>>
>> I'm with you on the schematics. Back then they were laid out like
>> railroad tracks (that's why the power lines are called "rails"). If you
>> observe, the B+ and ground lines are the rails and the circuits between
>> them are the ties. You can consider the signal path as the third rail.
>> The train goes down the track from left to right (East to West). It
>> makes sense, and once you learn it reading schematics laid out in that
>> form are simple. Even complex circuits are easy to read and can be taken
>> in as a whole in a glance. I'm an old fart and I built my first crystal
>> set back in 1947. Electronics was my working career and I taught it for
>> close to 30 years during that career.
>>
>> Jim ~ N5MSJ
>>
>> On 3/12/2016 12:31 PM, Michael michael.setaazul@...
>> [regenrx] wrote:
>>> Leonard,
>>>
>>> Beautifully presented schematic! The old world used to
>>> prioritise top-edge HT line, bottom-edge ground line
>>> and left-to-right signal path. Many new-age schematics
>>> follow an inscrutably superior neo-logic, which confounds me...
>>> My Dad was one of the youngest licenced hams, worked
>>> in hush-hush WW2 research, built one of the earliest
>>> Nipkow TV receivers (which should never have been junked).
>>> So I guess I am in genetic synaptic brain-warp...
>>>
>>> If I had the bits, I would love to replicate your designs.
>>> I am slowly collecting old AM radios, so perchance, one day...
>>>
>>> Michael
>>>

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>>> "In the interest of Regenerating radio's lost art of Regeneration"
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25965. Re: [regenrx] Ml.14 and 15

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-12 20:35:43 UTC
From: Jim Simmons
Topic: 25937 Message: 25965

Good point, Leonard; however, port to starboard cannot take compass points in consideration. My mind was conditioned on compass directions with North being up. I'm a confirmed landlubber. ;-)

Jim ~ N5MSJ

On 3/12/2016 2:18 PM, 'Leonard Meek' lemeek@... [regenrx] wrote:
> How about "from port to starboard"
>
> Leonard
>
>
>

25966. Re: [regenrx] Ml.14 and 15

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-12 21:40:21 UTC
From: Leonard Meek
Topic: 25937 Message: 25966

Avast there, I won't hold that against ya. Most of my carreer was being in and working for the Navy. All our schematics were power from the bottom up. That's probably why it's a hard habit to break. But I think as long as appropriate labeling is used, confusion should be minimal.

Leonard

----- Original Message -----
From: "Jim Simmons orion@... [regenrx]" <regenrx@yahoogroups.com>
To: <regenrx@yahoogroups.com>
Sent: Saturday, March 12, 2016 10:35 AM
Subject: Re: [regenrx] Ml.14 and 15

> Good point, Leonard; however, port to starboard cannot take compass
> points in consideration. My mind was conditioned on compass directions
> with North being up. I'm a confirmed landlubber. ;-)
>
> Jim ~ N5MSJ
>
> On 3/12/2016 2:18 PM, 'Leonard Meek' lemeek@... [regenrx]
> wrote:
>> How about "from port to starboard"
>>
>> Leonard
>>
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> "In the interest of Regenerating radio's lost art of Regeneration"
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25967. Re: [regenrx] Please help ID this crystal radio [3 Attachments]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-12 23:02:19 UTC
From: William Wood
Topic: 25951 Message: 25967

This is a beauty :)
But while it probably could
be used as a crystal set, I'm
more inclined to believe it is
a combination wave trap and
selective frequency pass band
thingie :)

If I am correct, you'd use it before
the crystal set to block out a stronger
signal that inter fears with the frequency
you are aiming to listen to, or just a general
pass band to filter out any and all signals
that are above or below your target frequency.

The person that built this took care and
looks like they knew what they wanted and
did a good job with it.

OK, my first guess, who else might know
about this item.

73 fer now
Bill KE9XQ

>
> Hi all,
> I just bought this old crystal set on Ebay Can anyone tell me what it is called, when it was popular and why does it have two tuning coils? I bought the one without the black knobs.
>
> Thanks Dan W3DKY
>
>
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>
> View attachments on the web
> Posted by: danyoder.cs@...
> Reply via web post • Reply to sender • Reply to group • Start a New Topic • Messages in this topic (1)
> Check out the automatic photo album with 3 photo(s) from this topic.
>

25968. Re: [regenrx] Please help ID this crystal radio

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-13 00:44:04 UTC
From: Daniel Yoder
Topic: 25951 Message: 25968

http://www.ebay.com/itm/131742283645?_trksid=p2057872.m2749.l2649&ssPageName=STRK%3AMEBIDX%3AIT

Thanks Bill Please read the desc

On Sat, Mar 12, 2016 at 6:02 PM, William Wood ke9xq@... [regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> This is a beauty :)
> But while it probably could
> be used as a crystal set, I’m
> more inclined to believe it is
> a combination wave trap and
> selective frequency pass band
> thingie :)
>
> If I am correct, you’d use it before
> the crystal set to block out a stronger
> signal that inter fears with the frequency
> you are aiming to listen to, or just a general
> pass band to filter out any and all signals
> that are above or below your target frequency.
>
> The person that built this took care and
> looks like they knew what they wanted and
> did a good job with it.
>
> OK, my first guess, who else might know
> about this item.
>
> 73 fer now
> Bill KE9XQ
>
>
>
> Hi all,
> I just bought this old crystal set on Ebay Can anyone tell me what it is
> called, when it was popular and why does it have two tuning coils? I bought
> the one without the black knobs.
>
> Thanks Dan W3DKY
>
>
>

> View attachments on the web
> <https://groups.yahoo.com/neo/groups/regenrx/attachments/2040257068;_ylc=X3oDMTJyanA1N2wyBF9TAzk3MzU5NzE0BGdycElkAzEzOTk2OTA3BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDYXR0YWNobWVudARzbGsDdmlld09uV2ViBHN0aW1lAzE0NTc3OTkwNjI->
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> Posted by: danyoder.cs@...
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> Reply via web post
> <https://groups.yahoo.com/neo/groups/regenrx/conversations/messages/25951;_ylc=X3oDMTJyb2oxbGM4BF9TAzk3MzU5NzE0BGdycElkAzEzOTk2OTA3BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAMyNTk1MQRzZWMDZnRyBHNsawNycGx5BHN0aW1lAzE0NTc3OTkwNjI-?act=reply&messageNum=25951>
> • Reply to sender
> <danyoder.cs@...?subject=Re%3A%20Please%20help%20ID%20this%20crystal%20radio>
> • Reply to group
> <regenrx@yahoogroups.com?subject=Re%3A%20Please%20help%20ID%20this%20crystal%20radio>
> • Start a New Topic
> <https://groups.yahoo.com/neo/groups/regenrx/conversations/newtopic;_ylc=X3oDMTJmZXF2M2xhBF9TAzk3MzU5NzE0BGdycElkAzEzOTk2OTA3BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNudHBjBHN0aW1lAzE0NTc3OTkwNjI->
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> <https://groups.yahoo.com/neo/groups/regenrx/conversations/topics/25951;_ylc=X3oDMTM3Zzc3YWVuBF9TAzk3MzU5NzE0BGdycElkAzEzOTk2OTA3BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAMyNTk1MQRzZWMDZnRyBHNsawN2dHBjBHN0aW1lAzE0NTc3OTkwNjIEdHBjSWQDMjU5NTE->
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> from this topic.
> [image: s-l1600rr.jpg] [image: s-l1600.jpg] [image: s-l1609i0.jpg]
> <https://groups.yahoo.com/neo/groups/regenrx/photos/photomatic/992303616;_ylc=X3oDMTE4M3R1OW82BF9TAzk3MzU5NzE0BGNmOQNQSE9UT01BVElDBHNlYwNtZWdhcGhvbmU->
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25971. RE: [regenrx] Please help ID this crystal radio

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-13 02:02:51 UTC
From: Mike Feher
Topic: 25951 Message: 25971

It looks like there is a small glass diode on the right most phone output jack. 73 – Mike

Mike B. Feher, N4FS

89 Arnold Blvd.

Howell, NJ, 07731

732-886-5960

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Saturday, March 12, 2016 9:00 PM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Please help ID this crystal radio

□

Interesting! A crystal set that picks up stations without a crystal! I also reached the conclusion that it was a wave trap of sorts. Mike, W6MAB

----- Original Message -----

From: Daniel Yoder danyoder.cs@gmail.com [regenrx] <mailto:danyoder.cs@...%20[regenrx]>

To: regenrx@yahoogroups.com

Sent: Saturday, March 12, 2016 4:44 PM

Subject: Re: [regenrx] Please help ID this crystal radio

http://www.ebay.com/itm/131742283645?_trksid=p2057872.m2749.l2649 <http://www.ebay.com/itm/131742283645?_trksid=p2057872.m2749.l2649&ssPageName=STRK%3AMEBIDX%3AIT>
&ssPageName=STRK%3AMEBIDX%3AIT

Thanks Bill Please read the desc

–’---

25972. Re: [regenrx] Please help ID this crystal radio

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-13 02:31:20 UTC
From: William Wood
Topic: 25951 Message: 25972

OK, sounds good :)
I did not see a crystal, but then
again it would be easy to hide
in those pictures…

It does look like a nice set, and
again, well built. Now that you
have it, does it look like it might
have been from a factory, or does
it look to you to be home made.

If it was home made, they sure
did a bang up job with it :)

I was hoping someone else would
have chimed in by now. Maybe
shortly someone will enlighten
me/us. Thanks for taking or sharing
those pictures, I did save them :)

73
Bill KE9XQ

On Mar 12, 2016, at 6:44 PM, Daniel Yoder danyoder.cs@... [regenrx]
<regenrx@yahoogroups.com> wrote:

>
> http://www.ebay.com/itm/131742283645?_trksid=p2057872.m2749.l2649&ssPageName=STRK%3AMEBI
DX%3AIT
>
> Thanks Bill Please read the desc
>
> On Sat, Mar 12, 2016 at 6:02 PM, William Wood ke9xq@... [regenrx]
<regenrx@yahoogroups.com> wrote:
>
> This is a beauty :)
>
> But while it probably could
> be used as a crystal set, I'm
> more inclined to believe it is
> a combination …

>> Hi all,
>> I just bought this old crystal set on Ebay Can anyone tell me what it is called, when it
was popular and why does it have two tuning coils? I bought the one without the black
knobs.
>>

>> Thanks Dan W3DKY
>>
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>> View attachments on the web
>> Posted by: danyoder.cs@...
>> Reply via web post • Reply to sender • Reply to group • Start a New Topic • Messages in this topic (1)
>> Check out the automatic photo album with 3 photo(s) from this topic.
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25973. Re: [regenrx] Please help ID this crystal radio

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-13 02:53:46 UTC
From: William Wood
Topic: 25951 Message: 25973

Boy, someone has good eyesight :)
Thanks, I really have a hard time
seeing it, and that with even being told
where to look :) Need my trifocals
adjusted :) Thanks again, and if you
do take that close up, I personally
would still love to see it :)
73 fer now
Bill KE9XQ

On Mar 12, 2016, at 8:31 PM, William Wood ke9xq@... [regenrx] <regenrx@yahoogroups.com>
wrote:

> OK, sounds good :)
>
> I did not see a crystal, but then
> again it would be easy to hide
> in those pictures…
>
>
> On Mar 12, 2016, at 6:44 PM, Daniel Yoder danyoder.cs@... [regenrx]
<regenrx@yahoogroups.com> wrote:
>
>>
>> http://www.ebay.com/itm/131742283645?_trksid=p2057872.m2749.l2649&ssPageName=STRK%3AMEB
IDX%3AIT
>>
>> Thanks Bill Please read the desc
>>
>> On Sat, Mar 12, 2016 at 6:02 PM, William Wood ke9xq@... [regenrx]
<regenrx@yahoogroups.com> wrote:
>>
>> This is a beauty
>>
>
>>> Hi all,
>>> I just bought this old crystal set on Ebay Can anyone tell me what it is called, when
it was popular and why does it have two tuning coils? I bought the one without the black
knobs.
>>>
>>> Thanks Dan W3DKY
>>>
>>>
>>>

25974. RE: KB3BYT and ceramic resonators for 40 meters band receiver project

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-13 03:06:52 UTC
From: qrper723@...
Topic: 25954 Message: 25974

Waiting for your good result!

ja9mat Hidehiko.

---In regenrx@yahoogroups.com, <coro@...> wrote :

To amigo Bob
Please contact Arnie CO2KK via
arnaldo.coro@... mailto:arnaldo.coro@...
Now working on the ceramic resonators 40 meters
band project
73 and DX
Arnie Coro
CO2KK

25976. Gridleak 2's regen receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-13 10:53:39 UTC
From: parkerp@...
Topic: 25976 Message: 25976

For those who didn't see it on RadioBoard.

Includes circuit, discussion on biasing arrangements & video demonstration.

Excellent results for just 2 transistors.

2 Transistor Receiver - TheRadioBoard Forums
http://theradioboard.com/rb/viewtopic.php?f=4&t=6891

http://theradioboard.com/rb/viewtopic.php?f=4&t=6891

2 Transistor Receiver - TheRadioBoard Forums
http://theradioboard.com/rb/viewtopic.php?f=4&t=6891 Garry wrote:Quite amazing performance, gridleak2! From only 2 transistors!

View on theradioboard.com http://theradioboard.com/rb/viewtopic.php?f=4&t=6891
Preview by Yahoo

25978. Re: [regenrx] Ml.14 and 15

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-13 13:13:14 UTC
From: david.newkirk@...
Topic: 25937 Message: 25978

Arnie wrote:

> Question:
> Would it not be better to have the 500 k volume control > at the grid of the first 12AX7 triode ?
> Or should it be placed between the first and the second triode,
> replacing the 470 k grid resistor ?
> There is A LOT OF GAIN available from those two
> triodes 12AX7 feeding into the 50C5

Reducing gain sooner is generally better than reducing gain later from a stage-overload point of view. That is, in a detector-AF-AF lineup, if you put the AF GAIN control between the two AF stages, AF output from the detector may overload the first AF stage, and no gain reduction by means of the AF GAIN control will be able to help. So from a gain-distribution point of view, making the AF GAIN control the grid resistor of the first AF stage is better.

That said, however, those still using ac on their tube heaters may find that with the AF GAIN control in the grid of the first stage, hum in the first stage may be objectionable by the time it's amplified by the entire AF chain, and turning down an AF GAIN control in the grid of the first tube in the chain won't help. In this case, putting the AF GAIN control between the two AF stages will maximize signal-to-hum ratio.

Ac hum from ac heater supply is, of course, a self-inflicted problem. It's 2016 and well-filtered, high-current dc sources abound. Using dc heater supply gives you more options, like being able to put the AF GAIN control in the grid of the first stage without regard to signal-to-hum ratio.

Putting the AF GAIN control between the two AF stages may also better hide motorboating problems. (Motorboating is when two or more tubes in the AF chain oscillate at a subaudio rate as a result of interstage coupling via the B+ line. The result is a sound like a motorboat from Central Casting.) If your receiver motorboats, you need to add decoupling in the B+ lines to one or more stages, beginning with the B+ line to the detector. I generally use a decoupling resistance of 1/20 or 1/10 the value of the plate load resistor, with a large capacitance (47 to 330 uF) connected to common from their junction. You should be able to turn up your radio's AF GAIN control all the way--with REGENERATION turned up as far as you ever will during normal operation--without motorboating.

Best regards,

Dave
amateur radio W9BRD

25979. Re: [regenrx] Please help ID this crystal radio [6 Attachments]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-13 13:17:16 UTC
From: William Wood
Topic: 25951 Message: 25979

OK :)
I see it now,
and thank you for the pixs
Like I said before nice job,
beautiful piece of work.
Think I'd just stare at it feather
then use it :) But then I like
coils and such..
73 again
Bill KE9XQ

On Mar 13, 2016, at 5:53 AM, Daniel Yoder danyoder.cs@... [regenrx]
<regenrx@yahoogroups.com> wrote:

>
> These are Bremer and Tully Coils I bid on one a month ago from the same guy and lost it went for 120.00 i won this for 50.00 glad i have patience. The one i lost is hard wired with black knobs
>
> On Sun, Mar 13, 2016 at 12:16 AM, 'Michael Bittner' mmab@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
> □

25980. Re: [regenrx] Please help ID this crystal radio

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-13 13:38:12 UTC
From: Daniel Yoder
Topic: 25951 Message: 25980

i just spoke to the guy that made them. he made 3 sold two and will keep one. he is 70 yrs old and has 75 radios follow him on the ebay link
i asked him some questions i will get back

On Sun, Mar 13, 2016 at 9:17 AM, William Wood ke9xq@... [regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> OK :)
> I see it now,
> and thank you for the pixs
> Like I said before nice job,
> beautiful piece of work.
> Think I'd just stare at it feather
> then use it :) But then I like
> coils and such..
> 73 again
> Bill KE9XQ
>
>
>
> On Mar 13, 2016, at 5:53 AM, Daniel Yoder danyoder.cs@gmail.com [regenrx]
> <regenrx@yahoogroups.com> wrote:
>
>
> These are Bremer and Tully Coils I bid on one a month ago from the same
> guy and lost it went for 120.00 i won this for 50.00 glad i have patience.
> The one i lost is hard wired with black knobs
>
> On Sun, Mar 13, 2016 at 12:16 AM, 'Michael Bittner' mmab@... [regenrx]
> <regenrx@yahoogroups.com> wrote:
>
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>

25985. Re: [regenrx] Ml.14 and 15

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-13 15:44:31 UTC
From: Prof. Arnaldo Coro Antich
Topic: 25937 Message: 25985

Muchas gracias... Thanks a lot amigo Dave for the
very well written analysis...Two 12AX7 triodes provide
a lot of gain, and you can introduce,with proper
switching, some type of audio filter, like ZL2JJ did
with his wonderful receiver.
Whenever possible it is a very good and nowadays
rather easy to implement idea to use regulated
DC on all the filaments of the vacuum tubes receivers...
Now back to the garage workshop where I am going
through many boxes where recycled parts are in
random storage (my fault), so paying the price to
go through all those boxes to find the parts to assemble
the receiver using the ceramic resonators for 40 meters...
then afterward will try to build a VFO using the same
type of resonators that are blue and have three legs...
73 and DX
Arnie
CO2KK
BTW; This morning checking on the two Cuban national
40 meters band nets, SSB and CW, propagation was
rather good... worked many stations on 7110 and 7115 kHz , and also
heard several USA CW stations rather
late in the morning... We are now, here in Cuba on
Eastern Daylight Saving Time 4 hours away from UTC

On 13/03/16 09:13, david.newkirk@... [regenrx] wrote:
>
>
> Arnie wrote:
>
> > Question:
> > Would it not be better to have the 500 k volume control
> > at the grid of the first 12AX7 triode ?
> > Or should it be placed between the first and the second triode,
> > replacing the 470 k grid resistor ?
> > There is A LOT OF GAIN available from those two
> > triodes 12AX7 feeding into the 50C5
>
> Reducing gain sooner is generally better than reducing gain later from
> a stage-overload point of vie w. That is, in a detector-AF-AF lineup,
> if you put the AF GAIN control between the two AF stages, AF output
> from the detector may overload the first AF stage, and no gain
> reduction by means of the AF GAIN control will be able to help. So
> from a gain-distribution point of view, making the AF GAIN control the
> grid resistor of the first AF stage is better.

>
> That said, however, those still using ac on their tube heaters may
> find that with the AF GAIN control in the grid of the first stage, hum
> in the first stage may be objectionable by the time it's amplified by
> the entire AF chain, and turning down an AF GAIN control in the grid
> of the first tube in the chain won't help. In this case, putting the
> AF GAIN control between the two AF stages will maximize signal-to-hum
> ratio.
>
> Ac hum from ac heater supply is, of course, a self-inflicted problem.
> It's 2016 and well-filtered, high-current dc sources abound. Using dc
> heater supply gives you more options, like being able to put the AF
> GAIN control in the grid of the first stage without regard to
> signal-to-hum ratio.
>
> Putting the AF GAIN control between the two AF stages may also better
> hide motorboating problems. (Motorboating is when two or more tubes in
> the AF chain oscillate at a subaudio rate as a result of interstage
> coupling via the B+ line. The result is a sound like a motorboat from
> Central Casting.) If your receiver motorboats, you need to add
> decoupling in the B+ lines to one or more stages, beginning with the
> B+ line to the detector. I generally use a decoupling resistance of
> 1/20 or 1/10 the value of the plate load resistor, with a large
> capacitance (47 to 330 uF) connected to common from their junction.
> You should be able to turn up your radio's AF GA IN control all the
> way--with REGENERATION turned up as far as you ever will during normal
> operation--without motorboating.
>
> Best regards,
>
> Dave
> amateur radio W9BRD
>
>
>
>
>
>

25986. Re: [regenrx] Ml.14 and 15

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-13 17:31:26 UTC
From: Leonard Meek
Topic: 25937 Message: 25986

Very informative. Putting the power switch on the ground side of the supply seems to help reduce the hum. Keeping the AC leads away from the audio grids helps too.

Leonard

----- Original Message -----
From: david.newkirk@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Sunday, March 13, 2016 3:13 AM
Subject: Re: [regenrx] Ml.14 and 15

Arnie wrote:

> Question:
> Would it not be better to have the 500 k volume control
> at the grid of the first 12AX7 triode ?
> Or should it be placed between the first and the second triode,
> replacing the 470 k grid resistor ?
> There is A LOT OF GAIN available from those two
> triodes 12AX7 feeding into the 50C5

Reducing gain sooner is generally better than reducing gain later from a stage-overload point of view. That is, in a detector-AF-AF lineup, if you put the AF GAIN control between the two AF stages, AF output from the detector may overload the first AF stage, and no gain reduction by means of the AF GAIN control will be able to help. So from a gain-distribution point of view, making the AF GAIN control the grid resistor of the first AF stage is better.

That said, however, those still using ac on their tube heaters may find that with the AF GAIN control in the grid of the first stage, hum in the first stage may be objectionable by the time it's amplified by the entire AF chain, and turning down an AF GAIN control in the grid of the first tube in the chain won't help. In this case, putting the AF GAIN control between the two AF stages will maximize signal-to-hum ratio.

Ac hum from ac heater supply is, of course, a self-inflicted problem. It's 2016 and well-filtered, high-current dc sources abound. Using dc heater supply gives you more options, like being able to put the AF GAIN control in the grid of the first stage without regard to signal-to-hum ratio.

Putting the AF GAIN control between the two AF stages may also better hide motorboating problems. (Motorboating is when two or more tubes in the AF chain oscillate at a subaudio rate as a result of interstage coupling via the B+ line. The result is a sound like a motorboat from Central Casting.) If your receiver motorboats, you need to add decoupling in the B+ lines to one or more stages, beginning with the B+ line to the detector. I generally use a decoupling resistance of 1/20 or 1/10 the value of the plate load resistor, with a large capacitance (47 to 330 uF) connected to common from their junction. You should be able to turn up your radio's AF GAIN control all the way--with REGENERATION turned up as

far as you ever will during normal operation--without motorboating.

Best regards,

Dave
amateur radio W9BRD

25987. Re: [regenrx] Gridleak 2's regen receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-13 18:42:39 UTC
From: Hubert Miller
Topic: 25976 Message: 25987

If the bias battery is really necessary, i'd go with it. But my thought is, use a PNP audio transistor and a single battery. A voltage divider off the -9 battery with a zener diode for regulation. I think the combination of this with the lytic cap 9 volt bypass should ("should") smooth out all audio voltage from the 9 volt supply so that SSB and CW reception does not warble.
This circuit is like the "new Doerle" (2 type 30 tube) going on 75 years later. Even the pot is reminiscent, as the old tube Doerles had a filament adjustment rheostat.
-Hue

25989. Re: [regenrx] Ml.14 and 15

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-14 02:58:47 UTC
From: david.newkirk@...
Topic: 25937 Message: 25989

Leonard wrote:

> Very informative. Putting the power switch on the ground side of the supply
> seems to help reduce the hum. Keeping the AC leads away from the audio grids helps too.

If by this you mean putting the power switch in the ac neutral lead rather than in the ac hot lead, maybe that could lead to less-hummy operation, but it's also less safe. We want our power switch to break the ac _hot_ lead; if we break only the neutral, the hot connection is still connected to the circuit to be powered, and only a fault (say, an internal short to chassis inside the power transformer, or a shorted neutral-to-chassis bypass capacitor between the switch and transformer) is necessary to set up a dangerous situation. A fuse or circuit breaker should break hot, not neutral, for the same reason.

Best regards,

Dave
amateur radio W9BRD

25990. Re: [regenrx] Ml.14 and 15

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-14 03:24:28 UTC
From: Bill Cromwell
Topic: 25937 Message: 25990

Um Dave,

In an AC/DC set what color are the leads on the power transformer?

73,

Bill KU8H

On 03/13/2016 10:58 PM, david.newkirk@... [regenrx] wrote:
>
> Leonard wrote:
>
>
> > Very informative. Putting the power switch on the ground side of the
> supply
> > seems to help reduce the hum. Keeping the AC leads away from the audio grids helps too.
>
> If by this you mean putting the power switch in the ac neutral lead
> rather than in the ac hot lead, maybe that could lead to less-hummy
> operation, but it's also less safe. We want our power switch to break
> the ac _hot_ lead; if we break only the neutral, the hot connection is
> still connected to the circuit to be powered, and only a fault (say,
> an internal short to chassis inside the power transformer, or a
> shorted neutral-to-chassis bypass capacitor between the switch and
> transformer) is necessary to set up a dangerous situation. A fuse or
> circuit breaker should break hot, not neutral, for the same reason.
>
> Best regards,
>
> Dave
> amateur radio W9BRD
>

25991. Re: [regenrx] Ml.14 and 15

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-14 04:30:59 UTC
From: Leonard Meek
Topic: 25937 Message: 25991

I use a relay to break the hot side. The control switch is on the neutral side of the relay. Nothing gets to the chassis (except ground) unless the switch is closed. However, the setup is not foolproof. A 9 volt guy could still get zapped.

Leonard

----- Original Message -----
From: david.newkirk@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Sunday, March 13, 2016 4:58 PM
Subject: Re: [regenrx] Ml.14 and 15

Leonard wrote:

> Very informative. Putting the power switch on the ground side of the supply
> seems to help reduce the hum. Keeping the AC leads away from the audio grids helps too.

If by this you mean putting the power switch in the ac neutral lead rather than in the ac hot lead, maybe that could lead to less-hummy operation, but it's also less safe. We want our power switch to break the ac _hot_ lead; if we break only the neutral, the hot connection is still connected to the circuit to be powered, and only a fault (say, an internal short to chassis inside the power transformer, or a shorted neutral-to-chassis bypass capacitor between the switch and transformer) is necessary to set up a dangerous situation. A fuse or circuit breaker should break hot, not neutral, for the same reason.

Best regards,

Dave
amateur radio W9BRD

25992. Re: [regenrx] Ml.14 and 15

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-14 04:39:34 UTC
From: Leonard Meek
Topic: 25937 Message: 25992

Actually, the whole idea of my "safety" circuit is to prevent the chassis
from being connected to the hot side if the outlet is wired backwards. The
fuse is to protect the line, not the radio.

Leonard

----- Original Message -----
From: "Bill Cromwell wrcromwell@... [regenrx]"
<regenrx@yahoogroups.com>
To: <regenrx@yahoogroups.com>
Sent: Sunday, March 13, 2016 5:24 PM
Subject: Re: [regenrx] Ml.14 and 15

> Um Dave,
>
> In an AC/DC set what color are the leads on the power transformer?
>
> 73,
>
> Bill KU8H
>
>
>
> On 03/13/2016 10:58 PM, david.newkirk@... [regenrx] wrote:
>>
>> Leonard wrote:
>>
>>
>> > Very informative. Putting the power switch on the ground side of the
>> supply
>> > seems to help reduce the hum. Keeping the AC leads away from the audio
>> > grids helps too.
>>
>> If by this you mean putting the power switch in the ac neutral lead
>> rather than in the ac hot lead, maybe that could lead to less-hummy
>> operation, but it's also less safe. We want our power switch to break
>> the ac _hot_ lead; if we break only the neutral, the hot connection is
>> still connected to the circuit to be powered, and only a fault (say,
>> an internal short to chassis inside the power transformer, or a
>> shorted neutral-to-chassis bypass capacitor between the switch and
>> transformer) is necessary to set up a dangerous situation. A fuse or
>> circuit breaker should break hot, not neutral, for the same reason.
>>
>> Best regards,
>>
>> Dave

>> amateur radio W9BRD
>>
>
>
>
> ------------------------------------
> Posted by: Bill Cromwell <wrcromwell@...>
> ------------------------------------
>
> "In the interest of Regenerating radio's lost art of Regeneration"
> ------------------------------------
>
> Yahoo Groups Links
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25993. Re: [regenrx] Ml.14 and 15

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-14 10:54:17 UTC
From: Bill Cromwell
Topic: 25937 Message: 25993

Hi Leonard,

One means I learned years ago for testing a 9 volt battery involves self-zapping. It's not recommended and I rarely do it..I have a small load and voltmeter to test them these days. I don't know how much current a fresh 9 volt battery will provide but I don't think I would want one in my jeans pocket shorting through a quarter or a dime! If we start building series stacks of those they will impress. Some of us take a "low dose" (81mg) aspirin each morning to protect hearts that are 'at risk'. Those little aspirins don't do a whole lot dose by dose. If you take the whole bottle full at once you will be in deep trouble. It's the same with "harmless" low voltage/low current batteries and single high current batteries. Again - the safety procedures apply. I have considered building an AC/DC radio and I would wire it to reduce the chances for having a hot chassis from a non-polarized plug. But I evolved my preferences to batteries before I got a round tuit. It's still not risk free. It just eliminates a source of hum and does not depend on the unreliable electric utility.

For a safer hobby try learning to play an acoustic musical instrument. There is no electricity involved so no shock danger. However some of them are heavy and could break small bones if they get dropped on your foot. Maybe best for some people to just stay in bed. <evil grin>

It really doesn't harm anybody to point out the dangers anywhere. At the same time we should point out there are procedures and means to reduce the risks to something 'normal'. Normal being equal or less than all the risks we face daily just getting out of bed (or even staying in bed).

Yours for safely *enjoying* the hobby.

73,

Bill KU8H

On 03/14/2016 12:30 AM, 'Leonard Meek' lemeek@... [regenrx]
wrote:
>
> □
>
> I use a relay to break the hot side. The control switch is on the
> neutral side of the relay. Nothing gets to the chassis (except ground)
> unless the switch is closed. However, the setup is not foolproof. A 9
> volt guy could still get zapped.
> Leonard
>

25994. RE: [regenrx] Ml.14 and 15

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-14 13:03:16 UTC
From: Hubert Miller
Topic: 25937 Message: 25994

Bill – i’m retired from an ILEC (“incumbent local exchange carrier”) phone company.

Some of the outside techs used to check 9 volt batts that way, but it was never to my “taste”.

As for the current from a 9 volt batt, the max current is limited by the internal resistance of

the battery, of course, but it will drive a couple amps for sure. I tried this once, and it will

light up a wire shorting it. But only one time, then the batt’s dead & gone. I was just interested

to see if a 9 volt battery could be used to fire something, like a rocket or glow plug engine or

whatever, just an experiment.

-Hue

25995. Re: [regenrx] Ml.14 and 15

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-14 17:17:35 UTC
From: Leonard Meek
Topic: 25937 Message: 25995

When I was a kid (and Noah was still building his Ark) batteries were scarce. Money was even scarcer, so batteries were not high on the list of options. I tried making my own batteries without much success. AC power was the only answer. You learn pretty quickly what not to do when woeking with 110 volts (as was the line voltage back then) Actually, driving a car is far more dangerous, especially if you live in Honolulu.

Leonard

----- Original Message -----
From: "Bill Cromwell wrcromwell@... [regenrx]"
<regenrx@yahoogroups.com>
To: <regenrx@yahoogroups.com>
Sent: Monday, March 14, 2016 12:54 AM
Subject: Re: [regenrx] Ml.14 and 15

> Hi Leonard,
>
> One means I learned years ago for testing a 9 volt battery involves
> self-zapping. It's not recommended and I rarely do it..I have a small
> load and voltmeter to test them these days. I don't know how much
> current a fresh 9 volt battery will provide but I don't think I would
> want one in my jeans pocket shorting through a quarter or a dime! If we
> start building series stacks of those they will impress. Some of us take
> a "low dose" (81mg) aspirin each morning to protect hearts that are 'at
> risk'. Those little aspirins don't do a whole lot dose by dose. If you
> take the whole bottle full at once you will be in deep trouble. It's the
> same with "harmless" low voltage/low current batteries and single high
> current batteries. Again - the safety procedures apply. I have
> considered building an AC/DC radio and I would wire it to reduce the
> chances for having a hot chassis from a non-polarized plug. But I
> evolved my preferences to batteries before I got a round tuit. It's
> still not risk free. It just eliminates a source of hum and does not
> depend on the unreliable electric utility.
>
> For a safer hobby try learning to play an acoustic musical instrument.
> There is no electricity involved so no shock danger. However some of
> them are heavy and could break small bones if they get dropped on your
> foot. Maybe best for some people to just stay in bed. <evil grin>
>
> It really doesn't harm anybody to point out the dangers anywhere. At the
> same time we should point out there are procedures and means to reduce
> the risks to something 'normal'. Normal being equal or less than all the
> risks we face daily just getting out of bed (or even staying in bed).
>

> Yours for safely *enjoying* the hobby.
>
> 73,
>
> Bill KU8H
>
> On 03/14/2016 12:30 AM, 'Leonard Meek' lemeek@... [regenrx]
> wrote:
>>
>> □
>>
>> I use a relay to break the hot side. The control switch is on the
>> neutral side of the relay. Nothing gets to the chassis (except ground)
>> unless the switch is closed. However, the setup is not foolproof. A 9
>> volt guy could still get zapped.
>> Leonard
>>
>
>
>
> ---
> Posted by: Bill Cromwell <wrcromwell@...>
> ---
>
> "In the interest of Regenerating radio's lost art of Regeneration"
> ---
>
> Yahoo Groups Links
>
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>

25996. Re: [regenrx] Ml.14 and 15

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-14 18:26:56 UTC
From: Phil
Topic: 25937 Message: 25996

Bill,
They don't have any color because they're invisible ;-)

73 From "The Beaconeer's Lair"
Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)

On 3/14/2016 3:24 AM, Bill Cromwell wrcromwell@... [regenrx] wrote:
>
> Um Dave,
>
> In an AC/DC set what color are the leads on the power transformer?
>
> 73,
>
> Bill KU8H
>

25997. Re: [regenrx] Ml.14 and 15

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-14 19:57:22 UTC
From: kevin asato
Topic: 25937 Message: 25997

Only during rush hours on the bi-directional lanes of the Nimitz and H-1!
73,
kevin
kc6pob

Actually,
driving a car is far

more dangerous, especially if you live in Honolulu.

25998. I'm back from Texas daughter wedding

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-15 00:44:08 UTC
From: Rob
Topic: 25998 Message: 25998

I've been away from email since last Tuesday.

I live in Pennsylvania.
My daughter got married in Texas.
I just got home and found 500 emails waiting.

73 Rob KB3BYT

25999. Re: [regenrx] I'm back from Texas daughter wedding

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-15 10:24:16 UTC
From: Prof. Arnaldo Coro Antich
Topic: 25998 Message: 25999

Congratulations amigo for the family now ready
to grow !
I think about two or three of the 500 e'mail messages
came from yours truly
Thanks a lot for keeping up our interest in the science
and magic of regenerative receivers....
Now working on a new one that, yes, uses three legged
blue ceramic resonators for 40 meters !
After the first test, I am now sure that several 500
kiloHertz electromechanical filters that lacked the
matching quartz crystal for the carrier oscillator may
be brought back to useful like by using 500 kiloHertz
ceramic piezoelectric resonators !!!
One good idea is always followed by several other
new ones !!!
Thanks a lot amigo Rob
73 and DX
Arnie Coro
CO2KK
The more radio amateurs are on the air ... the more
we people of this world understand each other better
with all the positive outcomes associated with
our communications !
On 14/03/16 20:44, Rob roomberg@... [regenrx] wrote:
> I've been away from email since last Tuesday.
>
> I live in Pennsylvania.
> My daughter got married in Texas.
> I just got home and found 500 emails waiting.
>
> 73 Rob KB3BYT
>
>
>
> ------------------------------------
> Posted by: Rob <roomberg@...>
> ------------------------------------
>
> "In the interest of Regenerating radio's lost art of Regeneration"
> ------------------------------------
>
> Yahoo Groups Links
>
>
>

>

26000. Re: [regenrx] MI.14 and 15

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-15 11:28:07 UTC
From: david.newkirk@...
Topic: 25937 Message: 26000

Bill wrote:

> Um Dave,
>
> In an AC/DC set what color are the leads on the power transformer?

Um, Bill, I wasn't talking about _transformer_ lead color, but the colors of the mains wiring in the house and at the cordset relative to wiring-color conventions common in electronics, according to which latter convention black is usually chassis/negative (and therefore "safe").

As discussed in this forum some time ago, I've lived the "switch in one wire, breaker in the other wire, hot fault to chassis with a nonpolarized plug" scenario with an HW-16 ham transceiver and it was only by luck that I wasn't injured.

As no less than Horowitz and Hill in _The Art of Electronics_ write, "Never build an instrument to run off the power line with a transformer! To so is to flirt with disaster. Transformerless power supplies, which are popular in some consumer electronics (radios and televisions, particularly) because they're cheap, put the circuit at high voltage with respect to external ground (water pipes, etc.). This has no place in instruments intended to interconnect with any other equipment and should always be avoided."

So _of course_ I wouldn't be writing with respect to transformerless operation, because I don't respect it at all..

Best regards,

Dave
amateur radio W9BRD

26001. Germanium transistor substitute

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-15 12:21:49 UTC
From: Dry Martini Holding Company☐
Topic: 26001 Message: 26001

Hello all,

I am looking at some older projects from the late 60s, early 70s where germanium transistor were used. Assuming the gain of is the same, can I simply plug a silicon PNP for the germanium PNP transistor, without any circuit mods. The first project is a simple side tone monitor Osc. that can be added to a tube transmitter.

Thank you,

Robert
KG4KGL

26002. Re: [regenrx] Germanium transistor substitute

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-15 12:38:08 UTC
From: Brian Ford
Topic: 26001 Message: 26002
Attachments: 1 described; binary payloads are missing from this source WARC

Here is one that when I catch up on the joys of home ownership, I plan to build.
Keith kf4tap
blockquote, div.yahoo_quoted { margin-left: 0 !important; border-left:1px #715FFA solid !important; padding-left:1ex !important; background-color:white !important; }

Sent from Yahoo Mail for iPad

On Tuesday, March 15, 2016, 07:21, Dry Martini Holding Company☐ qrp@... [regenrx] <regenrx@yahoogroups.com> wrote:

Hello all,

I am looking at some older projects from the late 60s, early 70s where germanium transistor were used. Assuming the gain of is the same, can I simply plug a silicon PNP for the germanium PNP transistor, without any circuit mods. The first project is a simple side tone monitor Osc. that can be added to a tube transmitter.

Thank you,

Robert
KG4KGL

26003. Re: [regenrx] Germanium transistor substitute

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-15 12:44:42 UTC
From: Jim Wiley
Topic: 26001 Message: 26003

Well, it depends. The bias settings for a germanium transistor is a bit different from a silicon transistor. Seeing as how a germanium junction takes about 0.3 or 0.45 volts to overcome, and a silicon junction takes about 0.5 to 0.7 volts.

If the transistor is used as a switch, then it probably doesn't make much difference, but if it is a class A amplifier, like a typical audio stage, then you will probably have to reset the bias. For a momentary test, you can probably get by without doing this, but long term use would benefit from resetting the bias levels.

If the oscillator in this case is a blocking type oscillator, probably no problem, but a sine-wave oscillator will probably suffer waveform distortion unless the bias is optimized. The best answer is "try it and see". You won't damage anything, the worst that can happen is the oscillator either won't start, or it will sound bad. And unlike years past, transistors nowadays are so cheap that you won't be out more than a few pennies if it blows up.

If you have access to an oscilloscope, use it to explore the output waveform as you make adjustments to the various resistors in the circuit. Don't change any of them more than 50% in value while doing these tests. If a change makes the circuit work better, either when starting or when running, then go ahead and use the new value(s).

Remember of course to take into account the different in supply voltages needed for between PNP and NPN circuitry.

- Jim, KL7CC

On 3/15/2016 4:21 AM, Dry Martini Holding Company☐ qrp@...
[regenrx] wrote:
>
>
> Hello all,
>
> I am looking at some older projects from the late 60s, early 70s where
> germanium transistor were used. Assuming the gain of is the same, can
> I simply plug a silicon PNP for the germanium PNP transistor, without
> any circuit mods. The first project is a simple side tone monitor Osc.
> that can be added to a tube transmitter.
>
> Thank you,
>
> Robert
> KG4KGL

>
>

26004. Re: [regenrx] Germanium transistor substitute

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-15 13:09:17 UTC
From: Phil
Topic: 26001 Message: 26004

No, at the very least they would require reworking the base bias
circuits. Silly-cone devices drop approximately .6 Volts across the
emitter/base junction. Germanium devices want to see something on the
order of .2 to .3 Volts bias. That would also mean having to rework any
AVC/AGC circuits. Of course a sidetone oscillator doesn't have AVC/AGC,
but you would still have to rework any bias circuits. . .

73 From "The Beaconeer's Lair"
Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)

PRESENT HF/LF RADIOS:
Grundigs: S-350 (~2006), G6 (2011) & S450DLX (2014).
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
Icom: IC-735 Transceiver (~1990).
Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
Icom: IC-7200 Transceiver (~2015).
R-Shack: DX-380 digital portable (~1990).
SDRs: Softrock Ensemble II LF (built from a kit 2015).
CommRadio CR-1A (~2015)
Zenith: Royal-7000 Transoceanic Portable (~1968).

ACCESSORIES: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 8 Hz Audio Filter.

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

On 3/15/2016 12:21 PM, Dry Martini Holding Company☐ qrp@...
[regenrx] wrote:
>
>
> Hello all,
>
> I am looking at some older projects from the late 60s, early 70s where
> germanium transistor were used. Assuming the gain of is the same, can
> I simply plug a silicon PNP for the germanium PNP transistor, without
> any circuit mods. The first project is a simple side tone monitor Osc.
> that can be added to a tube transmitter.
>
> Thank you,
>
> Robert

>

26005. Re: [regenrx] Ml.14 and 15

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-15 15:25:51 UTC
From: kevin asato
Topic: 25937 Message: 26005

From a 3-color line cord perspective (120VAC, 60Hz), BLACK is HOT, WHITE is NEUTRAL, GREEN is Chassis Ground.

On a 2-wire Line Cord, the WIDE lug is NEUTRAL. _All bets are off on an older 2-wire Line Cord with equal width lugs_ as there is no key to ensure correct "polarity" with the outlet.

The NEUTRAL lead is ground referenced back _at the distribution panel_ (not at the outlet!). This will ensure the chassis is not HOT if what's behind the wall is wired correctly. A quick test is to measure voltage between the wide lug (3-prong outlet) to the screw in the middle. It should read near zero volts.

73,
kevin
kc6pob

Bill, I wasn't talking about _transformer_ lead color,
but the colors of the mains wiring in the house and at the
cordset relative to wiring-color conventions common in
electronics, according to which latter convention black is
usually chassis/negative (and therefore
"safe").

26006. Re: [regenrx] Germanium transistor substitute [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-15 15:27:05 UTC
From: Dry Martini Holding Company☐
Topic: 26001 Message: 26006

That is one of the circuits that I want to build!

Robert
KG4KGL

> On Mar 15, 2016, at 08:38, Brian Ford kf4tap@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
> Here is one that when I catch up on the joys of home ownership, I plan to build.
>
>
> Keith kf4tap
> <QST_Apr_1966_p23.tiff>
>

26007. Re: [regenrx] Ml.14 and 15

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-15 17:22:22 UTC
From: Leonard Meek
Topic: 25937 Message: 26007

Dave, I build my transformerless devices for my own use, not for the masses. I do try to make them as safe as posible in case they survive me or fall into uneducated hands after my demise. My only fear is that some day the transformer police will break into my shop and arrest me for using an un grounded soldering iron.

Leonard

----- Original Message -----
From: david.newkirk@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Tuesday, March 15, 2016 1:28 AM
Subject: Re: [regenrx] Ml.14 and 15

Bill wrote:

> Um Dave,
>
> In an AC/DC set what color are the leads on the power transformer?

Um, Bill, I wasn't talking about _transformer_ lead color, but the colors of the mains wiring in the house and at the cordset relative to wiring-color conventions common in electronics, according to which latter convention black is usually chassis/negative (and therefore "safe").

As discussed in this forum some time ago, I've lived the "switch in one wire, breaker in the other wire, hot fault to chassis with a nonpolarized plug" scenario with an HW-16 ham transceiver and it was only by luck that I wasn't injured.

As no less than Horowitz and Hill in _The Art of Electronics_ write, "Never build an instrument to run off the power line with a transformer! To so is to flirt with disaster. Transformerless power supplies, which are popular in some consumer electronics (radios and televisions, particularly) because they're cheap, put the circuit at high voltage with respect to external ground (water pipes, etc.). This has no place in instruments intended to interconnect with any other equipment and should always be avoided."

So _of course_ I wouldn't be writing with respect to transformerless operation, because I don't respect it at all..

Best regards,

Dave
amateur radio W9BRD

26008. Re: [regenrx] Germanium transistor substitute

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-15 17:30:42 UTC
From: Brian Ford
Topic: 26001 Message: 26008

blockquote, div.yahoo_quoted { margin-left: 0 !important; border-left:1px #715FFA solid !important; padding-left:1ex !important; background-color:white !important; } Email me direct and I'll send you the PDF of the article if you want.
Keith kf4tap@...

Sent from Yahoo Mail for iPad

On Tuesday, March 15, 2016, 10:27, Dry Martini Holding Company☐ qrp@... [regenrx] <regenrx@yahoogroups.com> wrote:

That is one of the circuits that I want to build!
RobertKG4KGL

On Mar 15, 2016, at 08:38, Brian Ford kf4tap@... [regenrx] <regenrx@yahoogroups.com> wrote:

Here is one that when I catch up on the joys of home ownership, I plan to build.

Keith kf4tap
<QST_Apr_1966_p23.tiff>

26009. Re: [regenrx] Ant coupling to a Hartley regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-15 17:37:14 UTC
From: Prof. Arnaldo Coro Antich
Topic: 25892 Message: 26009

Dear amigos:

Biasing the gate of a FET from a separate power supply
in this case, just another 9 volts battery seems to
produce a very marked improvement of the regenerative
detector when that bias voltage is carefully changed
while observing the performance of the receiver.
I will try to determine if the 9 volts bias battery is
really required , or it can be replaced by a 3 volts
lithium cell....
Any comments from anyone building this design
will be most appreciated... FETs and MOSFETs are
not available locally here, so I tested the circuit
using a FET removed from a computer motherboard
for which the datasheet is not available !!!
Also I am interested in the use of the transistors
that can be recycled from compact fluorescent light
bulbs for audio amplification. AA1TJ Mike already
produced a receiver using those transistors !!!
73 and DX
Arnie Coro
CO2KK

26010. Re: [regenrx] Ant coupling to a Hartley regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-15 18:22:24 UTC
From: Cecil Bayona
Topic: 25892 Message: 26010

Ernie why don't you email directly to the group instead of going through someone else. Just curious.

On 3/15/2016 12:37 PM, 'Prof. Arnaldo Coro Antich' coro@...
[regenrx] wrote:
> Dear amigos:
>
>
> Biasing the gate of a FET from a separate power supply
> in this case, just another 9 volts battery seems to
> produce a very marked improvement of the regenerative
> detector when that bias voltage is carefully changed
> while observing the performance of the receiver.
> I will try to determine if the 9 volts bias battery is
> really required , or it can be replaced by a 3 volts
> lithium cell....
> Any comments from anyone building this design
> will be most appreciated... FETs and MOSFETs are
> not available locally here, so I tested the circuit
> using a FET removed from a computer motherboard
> for which the datasheet is not available !!!
> Also I am interested in the use of the transistors
> that can be recycled from compact fluorescent light
> bulbs for audio amplification. AA1TJ Mike already
> produced a receiver using those transistors !!!
> 73 and DX
> Arnie Coro
> CO2KK
>
--
Cecil Bayona - K5nwa
http://thepartsplace.k5nwa.com/

--
Cecil - k5nwa
http://thepartsplace.k5nwa.com/

26011. Re: [regenrx] Ml.14 and 15

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-15 18:27:12 UTC
From: Leonard Meek
Topic: 25937 Message: 26011

I use IEC connectors on most of my projects so one line cord fits all. Some time ago I bought a bunch of connectors that were made in UK I think, because they were color coded for 220VAC, but they still work on 120VAC. It just takes some ringing out to get the right polarity.

Leonard

----- Original Message -----
From: "kevin asato kc6pob@... [regenrx]" <regenrx@yahoogroups.com>
To: <regenrx@yahoogroups.com>
Sent: Tuesday, March 15, 2016 5:25 AM
Subject: Re: [regenrx] Ml.14 and 15

>
> From a 3-color line cord perspective (120VAC, 60Hz), BLACK is HOT, WHITE
> is NEUTRAL, GREEN is Chassis Ground.
>
> On a 2-wire Line Cord, the WIDE lug is NEUTRAL. _All bets are off on an
> older 2-wire Line Cord with equal width lugs_ as there is no key to ensure
> correct "polarity" with the outlet.
>
> The NEUTRAL lead is ground referenced back _at the distribution panel_
> (not at the outlet!). This will ensure the chassis is not HOT if what's
> behind the wall is wired correctly. A quick test is to measure voltage
> between the wide lug (3-prong outlet) to the screw in the middle. It
> should read near zero volts.
>
> 73,
> kevin
> kc6pob
>
> --
> Bill, I wasn't talking about _transformer_ lead color,
> but the colors of the mains wiring in the house and at the
> cordset relative to wiring-color conventions common in
> electronics, according to which latter convention black is
> usually chassis/negative (and therefore
> "safe").
>
>
> ------------------------------------
> Posted by: kevin asato <kc6pob@...>
> ------------------------------------
>
> "In the interest of Regenerating radio's lost art of Regeneration"
> ------------------------------------

>
> Yahoo Groups Links
>
>
>
>

26012. RE: [regenrx] Ant coupling to a Hartley regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-15 19:25:16 UTC
From: Hubert Miller
Topic: 25892 Message: 26012

I suggested changing the second transistor to a PNP, to be able to use only
one battery, and of course i missed that the FET still requires
B+, so this is wrong, not a solution.
It did occur to me to use a zener or LED in the FET source-to-ground, with a
pot and bypass cap across this; the wiper of the pot going to
the FET gate. The FET current might not be enough to keep the zener or LED
in its ideal working zone, so a resistor from the B+ to the
FET source might provide a little more current through the bias component.
-Hue Miller

26013. Re: [regenrx] Germanium transistor substitute

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-15 20:10:14 UTC
From: Paul Martin
Topic: 26001 Message: 26013

Another thing to remember when comparing germanium to silicon is that many germanium circuits were self biased by the inherently leaky germanium junction. In subbing a silicon device that bias must be supplied.

Paul

> On Mar 15, 2016, at 8:44 AM, Jim Wiley jwiley@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
> Well, it depends. The bias settings for a germanium transistor is a bit different from a silicon transistor. Seeing as how a germanium junction takes about 0.3 or 0.45 volts to overcome, and a silicon junction takes about 0.5 to 0.7 volts.
>
> If the transistor is used as a switch, then it probably doesn't make much difference, but if it is a class A amplifier, like a typical audio stage, then you will probably have to reset the bias. For a momentary test, you can probably get by without doing this, but long term use would benefit from resetting the bias levels.
>
> If the oscillator in this case is a blocking type oscillator, probably no problem, but a sine-wave oscillator will probably suffer waveform distortion unless the bias is optimized. The best answer is "try it and see". You won't damage anything, the worst that can happen is the oscillator either won't start, or it will sound bad. And unlike years past, transistors nowadays are so cheap that you won't be out more than a few pennies if it blows up.
>
> If you have access to an oscilloscope, use it to explore the output waveform as you make adjustments to the various resistors in the circuit. Don't change any of them more than 50% in value while doing these tests. If a change makes the circuit work better, either when starting or when running, then go ahead and use the new value(s).
>
> Remember of course to take into account the different in supply voltages needed for between PNP and NPN circuitry.
>
> - Jim, KL7CC
>
>
>
>> On 3/15/2016 4:21 AM, Dry Martini Holding Company☐ qrp@... [regenrx] wrote:
>>
>>
>> Hello all,
>>
>> I am looking at some older projects from the late 60s, early 70s where germanium transistor were used. Assuming the gain of is the same, can I simply plug a silicon PNP for the germanium PNP transistor, without any circuit mods. The first project is a simple side tone monitor Osc. that can be added to a tube transmitter.
>>
>> Thank you,
>>
>> Robert
>> KG4KGL
>>
>

>

26014. Re: Ant coupling to a Hartley regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-15 21:04:45 UTC
From: nzerowva@...
Topic: 25892 Message: 26014

Its been my experience that with a straight regen (no rf amp) that what works the best as a general rule of thumb is adjustable capacitive coupling for anything below about 2.5 mhz. Anything higher in frequency link coupling seems to work fine, even if you using a "long wire". With resonant antennas, again link coupling works the best due to lower impedances, but usually one turn and very light coupling.

26015. Re: [regenrx] Ant coupling to a Hartley regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-15 21:05:48 UTC
From: nzerowva@...
Topic: 25892 Message: 26015

Arnie, are you having trouble with your emails? Havent heard from you in a while. Glad to hear you got that circuit working.

26016. Re: [regenrx] Ant coupling to a Hartley regen

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-15 21:22:28 UTC
From: Doug Hancock
Topic: 25892 Message: 26016

Hue,

The green LED does work best out of all the colors, no need to jump it with a capacitor, I found very little difference, if any in operation. If your power supply is adjustable, you can vary the drain voltage to get it to work the best. The green LED worked best for me at 12 to 18 volts.

On Tuesday, March 15, 2016 2:25 PM, "Hubert Miller kargo_cult@msn.com [regenrx]" <regenrx@yahoogroups.com> wrote:

  I suggested changing the second transistor to a PNP, to be able to use only
one battery, and of course i missed that the FET still requires
B+, so this is wrong, not a solution.
It did occur to me to use a zener or LED in the FET source-to-ground, with a
pot and bypass cap across this; the wiper of the pot going to
the FET gate. The FET current might not be enough to keep the zener or LED
in its ideal working zone, so a resistor from the B+ to the
FET source might provide a little more current through the bias component.
-Hue Miller

26017. Re: [regenrx] Gridleak 2's regen receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-15 21:30:13 UTC
From: nzerowva@...
Topic: 25976 Message: 26017

Hue, its amazing something so simple works so well.

26018. Re: Gridleak 2's regen receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-15 21:32:43 UTC
From: nzerowva@...
Topic: 25976 Message: 26018

Peter, I dont know how I can get any more performance out of such a simple circuit. Instead of using a power mosfet in class A in place of the 2n3904, but it was very inefficient and did not improve the results like I had hoped.

26019. SOURCE for Germanium transistor substitute

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-15 22:00:38 UTC
From: kf8zn@...
Topic: 26001 Message: 26019

Surplus Russian Military PNP Ge transistors can be found on eBay quite cheaply.
Here is one seller at $30 shipped for 100. I have no affiliation.

IT313B-- PNP germanium transistors--lot of 100--Box http://www.ebay.com/itm/IT313B-PNP-germanium-transistors-lot-of-100-Box-/151930063416?hash=item235fbcca38:g:JA8AAOSwHPlWgEeK

http://www.ebay.com/itm/IT313B-PNP-germanium-transistors-lot-of-100-Box-/151930063416?hash=item235fbcca38:g:JA8AAOSwHPlWgEeK

IT313B-- PNP germanium transistors--lot of 100--Box http://www.ebay.com/itm/IT313B-PNP-germanium-transistors-lot-of-100-Box-/151930063416?hash=item235fbcca38:g:JA8AAOSwHPlWgEeK US $25.00 New other (see details) in Business & Industrial, Electrical & Test Equipment, Electronic Components

View on www.ebay.com http://www.ebay.com/itm/IT313B-PNP-germanium-transistors-lot-of-100-Box-/151930063416?hash=item235fbcca38:g:JA8AAOSwHPlWgEeK
Preview by Yahoo

26020. Substituting Ge Xstrs

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-15 22:04:31 UTC
From: kf8zn@...
Topic: 26020 Message: 26020

Here is a link to a Gentleman who devoted 20 minutes to the subject.

Russian Germanium Transistors In Zenith Transoceanic Repair
https://www.youtube.com/watch?v=wet7QameYc4

https://www.youtube.com/watch?v=wet7QameYc4

Russian Germanium Transistors In Zenith Trans...
https://www.youtube.com/watch?v=wet7QameYc4 Substitution replacement vintage radio transistors with USSR era new old stock

View on www.youtube.com https://www.youtube.com/watch?v=wet7QameYc4
Preview by Yahoo

26021. Re: [regenrx] Substituting Ge Xstrs

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-15 23:39:52 UTC
From: Rajaram Bhat
Topic: 26020 Message: 26021

Ge transistors are available from NTE Electronics. See for example
http://www.alliedelec.com/nte-electronics-inc-nte126/70214872/

Raj

26022. Germanium transistor substitute in CW MONITOR circuit

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-16 04:31:36 UTC
From: Rob
Topic: 26001 Message: 26022

The TIFF picture and the PDF source sort of stumble the learning process for some of us so I made JPGs and put it here:

http://www.learnmorsecode.com/cwmonitor/index.html

26023. Re: [regenrx] Substituting Ge Xstrs GT313V for the 2N1300 & 1N34A for the 1N67A

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-16 05:50:44 UTC
From: Rob
Topic: 26020 Message: 26023

I bought GT313V on ebay... 42 cents each....
definitely need to learn some Russian.
guessing how to translate
BASA is BASE
EMUMMEP is EMMITER
KONNEKMOP is COLLECTOR

image here:

http://www.learnmorsecode.com/cwmonitor/GT313V.jpg

so I was thinking of replacing a GT313V for the 2N1300
and a 1N34A for the 1N67A in the CW monitor circuit.

http://www.learnmorsecode.com/cwmonitor/index.html

On 03/15/2016 06:04 PM, kf8zn@... [regenrx] wrote:
>
> Here is a link to a Gentleman who devoted 20 minutes to the subject.
>
>
> Russian Germanium Transistors In Zenith Transoceanic Repair
> <https://www.youtube.com/watch?v=wet7QameYc4>
>
>
>
>
> image <https://www.youtube.com/watch?v=wet7QameYc4>
>
>
> Russian Germanium Transistors In Zenith Trans...
> <https://www.youtube.com/watch?v=wet7QameYc4>
> Substitution replacement vintage radio transistors with USSR era new
> old stock
>
> View on www.youtube.com <https://www.youtube.com/watch?v=wet7QameYc4>
>
> Preview by Yahoo
>
>
>

26024. Re: [regenrx] Substituting Ge Xstrs GT313V for the 2N1300 & 1N34A for the 1N67A

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-16 10:37:53 UTC
From: Prof. Arnaldo Coro Antich
Topic: 26020 Message: 26024

Yes, those germanium transistors were very well
made amigos... The only problem they had was
corrosion of the pigtails !!! So we painted them with
nail polish and... problem solved !!!
73 and DX
Arnie

On 16/03/16 01:50, Rob roomberg@... [regenrx] wrote:
>
>
> I bought GT313V on ebay... 42 cents each....
> definitely need to learn some Russian.
> guessing how to translate
> BASA is BASE
> EMUMMEP is EMMITER
> KONNEKMOP is COLLECTOR
>
> image here:
>
> http://www.learnmorsecode.com/cwmonitor/GT313V.jpg
>
> so I was thinking of replacing a GT313V for the 2N1300
> and a 1N34A for the 1N67A in the CW monitor circuit.
>
> http://www.learnmorsecode.com/cwmonitor/index.html
>
>
>
> On 03/15/2016 06:04 PM, kf8zn@... [regenrx] wrote:
>>
>> Here is a link to a Gentleman who devoted 20 minutes to the subject.
>>
>>
>> Russian Germanium Transistors In Zenith Transoceanic Repair
>> <https://www.youtube.com/watch?v=wet7QameYc4>
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>> image <https://www.youtube.com/watch?v=wet7QameYc4>
>>
>>
>> Russian Germanium Transistors In Zenith Trans...
>> <https://www.youtube.com/watch?v=wet7QameYc4>

>> Substitution replacement vintage radio transistors with USSR era new
>> old stock
>>
>> View on www.youtube.com <https://www.youtube.com/watch?v=wet7QameYc4>
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>> Preview by Yahoo
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26025. FS: Radio Handbooks, manuals etc.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-16 12:16:54 UTC
From: Bry Carling
Topic: 26025 Message: 26025

FOR SALE:

ARRL Handbook, 1960 paperback

SOLD!!

1989 ARRL Handbook

Hardback Edition in excellent condition.

Available for $20.00 plus shipping.

2015 ARRL Handbook

Like New! Hardback copy in excellent condition.

Available for $25.00 plus shipping

RADIO AMATEUR CALLBOOK 1960

RARE!! Some great nostalgia here. In good condition for its age.

Have fun looking up old call signs from yesteryear!

Available for $20.00 plus shipping

ARRL ANTENNA BOOK, 20th Edition

This look brand new. Hardback Edition. List price $39.95

Available for $20.00 plus shipping

HEATHKIT VF1 VFO manual - original - excellent, with notes.

Available for $15.00 plus shipping

Details and updates at:

http://af4k.com/books.htm

E-mail me to arrange purchase.

af4k@...

73 - Bry Carling AF4K

26026. converting CB Radio To listen HF

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-16 16:17:26 UTC
From: ernandot@...
Topic: 26026 Message: 26026

Easy convert your project CB Radio To listen HF, designed by Amateur Radio YB3LVX, easy to install and works even:
see the video and download the project:

Conversor CB to HF or SW https://www.youtube.com/watch?v=eZdhZaFnLe0

https://www.youtube.com/watch?v=eZdhZaFnLe0

Conversor CB to HF or SW https://www.youtube.com/watch?v=eZdhZaFnLe0 Super simples conversor CB To HF idealizado pelo radio Amador YB3LVX.,facil de montar e funciona mesmo.baixe o projeto : http://www.4s...

View on www.youtube.com https://www.youtube.com/watch?v=eZdhZaFnLe0
Preview by Yahoo

26027. Capitalism at its finest. PENNY transistors for Arnie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-16 16:57:21 UTC
From: Rob
Topic: 26020 Message: 26027

Arnie said that he has UNOBTANIUM class parts.... FETs
MOSFETs...NE602..... AUDIO ICs.. etc.
BUT
things change fast with the brand new embargo and postal laws so I
suggested that we track down some
penny parts on EBAY and Arnie said he never used and is unfamiliar with
EBAY.....
so I figured I would show an example of how cheap, easy and simple it is
to go to EBAY and spend $10.60 on
1,000 transistors.
http://www.learnmorsecode.com/ebay/index.html

2N7000 MOSFETs cost 10 cents now.

I spent $300 on 10,000 various components last year and now just about
anything I find a schematic for is fair game
without waiting for an obscure part ...like a J310 .... to arrive in the
mail.
Unless of course it is an obscure part I don't have yet like a PNP
germanium transistor.....
but I expect to have them in a week or two.

26028. Re: Germanium transistor substitute in CW MONITOR circuit

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-16 18:45:53 UTC
From: kf8zn@...
Topic: 26001 Message: 26028

THAT is an Ingenious Circuit!

Also verifies RF output from the transmitter, so it's B.I.T.E.

26029. Re: [regenrx] Capitalism at its finest. PENNY transistors for Arnie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-16 18:17:55 UTC
From: <aa9il@...>
Topic: 26020 Message: 26029

Hello all and Hola Señor Arnie
First posting to the group but I really the discussion on the regenny rx - and regarding germanium transistors, is there a preferred and quick way to test - I do not have a curve tracer. Reason for asking is I acquired a small container full of early 60's vintage Western Electric transistors (and some gold plated hybrid integrated circuit can's that came from a SAGE computer) - I was originally going to test these out for friends who build guitar fuzz pedals but these could show promise in a RF circuit.73Mike AA9IL

On Wednesday, March 16, 2016 11:57 AM, "Rob roomberg@... [regenrx]" <regenrx@yahoogroups.com> wrote:

  Arnie said that he has UNOBTANIUM class parts.... FETs
MOSFETs...NE602..... AUDIO ICs.. etc.
BUT
things change fast with the brand new embargo and postal laws so I
suggested that we track down some
penny parts on EBAY and Arnie said he never used and is unfamiliar with
EBAY.....

so I figured I would show an example of how cheap, easy and simple it is
to go to EBAY and spend $10.60 on
1,000 transistors.
http://www.learnmorsecode.com/ebay/index.html

2N7000 MOSFETs cost 10 cents now.

I spent $300 on 10,000 various components last year and now just about
anything I find a schematic for is fair game
without waiting for an obscure part ...like a J310 .... to arrive in the
mail.
Unless of course it is an obscure part I don't have yet like a PNP
germanium transistor.....
but I expect to have them in a week or two.

26030. Re: [regenrx] Germanium transistor substitute

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-16 21:20:58 UTC
From: Dry Martini Holding Company☐
Topic: 26001 Message: 26030

Replying to my own thread. I started building this last night, Manhattan style.

Robert
KG4KGL

> On Mar 15, 2016, at 11:27, Dry Martini Holding Company☐ qrp@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
> That is one of the circuits that I want to build!
>
> Robert
> KG4KGL
>
>
>> On Mar 15, 2016, at 08:38, Brian Ford kf4tap@... [regenrx] <regenrx@yahoogroups.com> wrote:
>>
>>
>> Here is one that when I catch up on the joys of home ownership, I plan to build.
>>
>>
>> Keith kf4tap
>> <QST_Apr_1966_p23.tiff>
>
>

26031. Re: [regenrx] Germanium transistor substitute

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-16 22:23:53 UTC
From: Michael
Topic: 26001 Message: 26031

Robert,
Little hope that it will work built Manhatten style.
Given its noble provenance, tag-strips are the sole authorised construct.
:-)
Michael

> Replying to my own thread. I started building this last night,
> Manhattan style.
>
> Robert
> KG4KGL

26032. Re: [regenrx] Capitalism at its finest. PENNY transistors for Arnie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-16 22:27:09 UTC
From: Michael
Topic: 26020 Message: 26032

Rob, if you encounter difficulties in obtaining quality Ge PNPs,
I would be very happy to send you a few harvested from
an old frequency counter.

Michael

On 16.03.16 16:57, Rob roomberg@... [regenrx] wrote:
. . .
I don't have yet like a PNP germanium transistor.....

but I expect to have them in a week or two.

26033. Re: [regenrx] Germanium transistor substitute

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-16 23:10:54 UTC
From: Brian Ford
Topic: 26001 Message: 26033

blockquote, div.yahoo_quoted { margin-left: 0 !important; border-left:1px #715FFA solid !important; padding-left:1ex !important; background-color:white !important; } Pics! Comments! Let us know how it's going!
Keith

Sent from Yahoo Mail for iPad

On Wednesday, March 16, 2016, 16:21, Dry Martini Holding Company☐ qrp@... [regenrx] <regenrx@yahoogroups.com> wrote:

Replying to my own thread. I started building this last night, Manhattan style.
RobertKG4KGL

On Mar 15, 2016, at 11:27, Dry Martini Holding Company☐ qrp@... [regenrx] <regenrx@yahoogroups.com> wrote:

That is one of the circuits that I want to build!
RobertKG4KGL

On Mar 15, 2016, at 08:38, Brian Ford kf4tap@... [regenrx] <regenrx@yahoogroups.com> wrote:

Here is one that when I catch up on the joys of home ownership, I plan to build.

Keith kf4tap
<QST_Apr_1966_p23.tiff>

26034. Re: Substituting Ge Xstrs

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-17 00:40:28 UTC
From: les.au49@...
Topic: 26020 Message: 26034

I can confirm your translation is correct.

I have cyrillic script on this PC BUT it only present PRINTEDcharacters.
BUT - with a few clues help. First the characters you see as "m" are Russian SCRIPT characters for "T"

26035. Re: Substituting Ge Xstrs

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-17 01:11:32 UTC
From: les.au49@...
Topic: 26020 Message: 26035

I confirm your transliteration is correct. The letter that appear as "m" is Russian script for "t".
But the printed "M" transliterates to Latin/English "m". So EMummep -> Emitter. However, in printed characters the Latin "T" is simply "T", not "m". The KGB did this to confuse the CIA. (!!!)

The word, Korpus is "body".

"P" is the Greek rho, or "R"
"pi" - two uprights with a lintel is "P" - as in "pi".

With that info: baza, eMummep and Kollektor drop out easily. The "Л" is "lambda" or "L"
So Коллектор -> collector.

Russian is a beautiful language, very symmetrical and once the alphabet and a few rules are known the rest is plain memory. There are 32 or 33 characters in the Russian alphabet. The great advantage of this is that Russian text uses a single character to represent sounds English must represent by several. e.g. in kitchen the "ch" sound is represented by the single Russian by ч. And the backwards "R" (i.e. Я) is the first sound in "yard".

The Cyrillic characters will only appear on screens where a Cyrillic script is available. Now I'll see whether the Cyrillic fonts make it thru to your screen!

Les

26036. Re: [regenrx] Re: Substituting Ge Xstrs Russian translations THANKYOU

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-17 02:04:07 UTC
From: Rob
Topic: 26020 Message: 26036

thank you

I reworked the image and put it here:
http://www.learnmorsecode.com/cwmonitor/GT313V.jpg
on
http://www.learnmorsecode.com/cwmonitor/index.html

On 03/16/2016 09:11 PM, les.au49@... [regenrx] wrote:
>
>
> I confirm your transliteration is correct. The letter that appear as
> "m" is Russian script for "t".
> But the printed "M" transliterates to Latin/English "m". So EMummep
> -> Emitter. However, in printed characters the Latin "T" is simply
> "T", not "m". The KGB did this to confuse the CIA. (!!!)
>
> The word, Korpus is "body".
>
> "P" is the Greek rho, or "R"
> "pi" - two uprights with a lintel is "P" - as in "pi".
>
> With that info: baza, eMummep and Kollektor drop out easily. The "Л"
> is "lambda" or "L"
> So Коллектор -> collector.
>
> Russian is a beautiful language, very symmetrical and once the
> alphabet and a few rules are known the rest is plain memory. There
> are 32 or 33 characters in the Russian alphabet. The great advantage
> of this is that Russian text uses a single character to represent
> sounds English must represent by several. e.g. in kitchen the "ch"
> sound is represented by the single Russian by ч. And the backwards
> "R" (i.e. Я) is the first sound in "yard".
>
> The Cyrillic characters will only appear on screens where a Cyrillic
> script is available.
> Now I'll see whether the Cyrillic fonts make it thru to your screen!
>
> Les
>
>
>

26037. Re: [regenrx] Capitalism at its finest. PENNY transistors for Arnie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-17 02:22:57 UTC
From: Rob
Topic: 26020 Message: 26037

Thanks for the offer but hang on to your Ge PNPs.
I dabble with simple electronics circuits for radio with the goal being that
I can kit a pile of them and pass them on to scouts and my local radio club.
So when I buy into a circuit I try to come up with 50 to a 100 components
from one source.
This has worked out pretty well... even with UNOBTANIUM parts like 1N34A
catwhisker diodes
which I sourced 1,000 of them from Bulgaria last year for pennies, not
dollars, for each diode.
So if I give away 100 crystal radios once a year for the next 10 years I
have the parts.

I found that when I tried to buy 1N34A diodes in bulk I received
silicon 1N60 diodes.
Hundreds of them from sources saying they were germanium.
Its a language barrier problem somewhere.
Its the only component I got the wrong part... more than once, out of
hundreds of different components
I bought last year.
So when these germanium transistors arrive I will get to play with a
repeatable and sharable
circuit.

On 03/16/2016 06:27 PM, Michael michael.setaazul@...
[regenrx] wrote:
>
> Rob, if you encounter difficulties in obtaining quality Ge PNPs,
> I would be very happy to send you a few harvested from
> an old frequency counter.
>
> Michael
>
> On 16.03.16 16:57, Rob roomberg@... [regenrx] wrote:
> . . .
> I don't have yet like a PNP germanium transistor.....
>
> but I expect to have them in a week or two.
>
>

26038. terminal strips ..... tag strips.... what type of metal is the tag?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-17 03:53:51 UTC
From: Rob
Topic: 26001 Message: 26038

Just a curiosity here..... tag-strips... terminal strips.....
I have a bunch of old stock that has a few different kinds of metal in them.
None are rusting or tarnished.
What kind of metal did they make the tags out of?
I want to replace a broken tag in a phenolic base so I was considering
using sheet brass.... just because it bends just enough to play with it.
I figured once soldered it all is just a blob anyway.

On 03/16/2016 06:23 PM, Michael michael.setaazul@...
[regenrx] wrote:
>
> Robert,
> Little hope that it will work built Manhatten style.
> Given its noble provenance, tag-strips are the sole authorised
> construct.
> :-)
> Michael
>
>> Replying to my own thread. I started building this last night,
>> Manhattan style.
>>
>> Robert
>> KG4KGL
>
>

26039. Re: [regenrx] Capitalism at its finest. PENNY transistors for Arnie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-17 21:25:43 UTC
From: Jim Simmons
Topic: 26020 Message: 26039

Rob,
The 1N60 is a germanium diode, Not silicon. The characteristics are almost the same as the 1N34A. The main difference is that the 1N34A is a point contact germanium diode and the 1N60 is a gold-bonded contact germanium diode. In most cases the 1N60 can be substituted for the 1N34A.

Jim ~ N5MSJ

On 3/16/2016 9:22 PM, Rob roomberg@... [regenrx] wrote:
>
> ~snip~
>
> I found that when I tried to buy 1N34A diodes in bulk I received
> silicon 1N60 diodes.
> Hundreds of them from sources saying they were germanium.
> Its a language barrier problem somewhere.
> Its the only component I got the wrong part... more than once, out of
> hundreds of different components
> I bought last year.
> So when these germanium transistors arrive I will get to play with a
> repeatable and sharable
> circuit.
>
>

26040. Re: [regenrx] Germanium transistor substitute

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-17 22:35:15 UTC
From: Dry Martini Holding Company☐
Topic: 26001 Message: 26040

Well I have started on it. I have to if the transistors mounted, and pads in place for the other two. I had planned to work on it last night, but three martinis and a rock concert kind of hindered any progress.

I have this weekend off, so will work on it. This is my first Manhattan construction project, so I may be building this in a larger layout than is needed. Pictures to follow.

Robert
KG4KGL

> On Mar 16, 2016, at 19:10, Brian Ford kf4tap@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
> Pics! Comments! Let us know how it's going!
>
>
> Keith
>
>
> Sent from Yahoo Mail for iPad
>
> On Wednesday, March 16, 2016, 16:21, Dry Martini Holding Company☐ qrp@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
>
> Replying to my own thread. I started building this last night, Manhattan style.
>
> Robert
> KG4KGL
>
>
>> On Mar 15, 2016, at 11:27, Dry Martini Holding Company☐ qrp@... [regenrx] <regenrx@yahoogroups.com> wrote:
>>
>>
>> That is one of the circuits that I want to build!
>>
>> Robert
>> KG4KGL
>>
>>
>>> On Mar 15, 2016, at 08:38, Brian Ford kf4tap@... [regenrx] <regenrx@yahoogroups.com> wrote:
>>>
>>>
>>> Here is one that when I catch up on the joys of home ownership, I plan to build.
>>>
>>>

>>> Keith kf4tap
>>> <QST_Apr_1966_p23.tiff>
>
>

26041. Re: [regenrx] Germanium transistor substitute

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-18 11:19:24 UTC
From: Dry Martini Holding Company☐
Topic: 26001 Message: 26041

I need a little help. I have looked at various tutorials, but they all assume a lot, or do not explain some things.

How do calculate the value of Rb in the "better side tone oscillator? I know Rc is chosen to drop 1/2 of VCC.

Thank you,

Robert
KG4KGL

Sent from my iPhone

> On Mar 17, 2016, at 18:35, Dry Martini Holding Company☐ qrp@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
> Well I have started on it. I have to if the transistors mounted, and pads in place for the other two. I had planned to work on it last night, but three martinis and a rock concert kind of hindered any progress.
>>
>
>

26042. Re: [regenrx] Capitalism at its finest. 1N34A FRAUD

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-18 12:37:34 UTC
From: Rob
Topic: 26020 Message: 26042

Check out this picture of four diodes.
http://www.learnmorsecode.com/help/diodes.jpg

The goal was to buy 100 1N34A diodes to donate to a kids
gig....Community Safety Day...last May.
I figured parts were pennies so I wanted to donate 100 crystal radios to
the educational cause.
I bought a hundred diodes on a sale titled 1N34A germanium diodes on EBAY.
The diodes arrived and they were definitely not catwhisker diodes.
They are marked "A" in the picture.

I bought other 100 diode batches that had black and blue and green
stripes and no markings
printed on them. They looked like silicon diodes to me. All frauds....
sales titled 1N34A germanium diodes.
So just out of curiosity I bought a sale titled 1N60 germanium diode and
again I got the green stripe diode
the same as the "A" diode.

Then forum wizards told me to buy from
https://www.mikeselectronicparts.com
so I bought the 1N60 diodes marked "B" in the picture.
They were germanium catwhisker diodes.
But they cost 45 cents each and that cost adds up fast when you want to
buy a 1,000 diodes so
I kept hammering the EBAY sales until I found a Bulgarian source that
was 2AA113 diodes....marked "C"
in the picture that sold for a nickel per diode.

So just for giggles I bought 1N60P diodes ..."D" in the
picture......and they were marked 1N60P.
That sort of etched in stone the fact that the green stripe fraud diodes
were 1N60P silicon diodes.

I'm not an electrical engineer with a test bench that can tell me WHAT
the unmarked diodes are so
my one and only test was to place the diodes into the circuit in my
crystal radio.
The tiny diodes were stone dead quiet.
All of the catwhisker diodes played loud and clear AM broadcast radio
stations unless they were physically defective with
the cat whisker not maker contact with the flat plate of germanium.

As I collected this stash of diodes I was told that I can bias the
silicon diodes with one AA battery and they will come to
life and receive AM radio.

So I experimented with a dozen different diodes and received broadcast
radio stations from around the world
with 1N4148 diodes.
It was a very interesting learning experience which sent me down the
regenerative receiver path
because I wanted to know more about HOW this worked, not just build
receivers.

http://www.learnmorsecode.com/help/xtal1.html

So when I said I received silicon 1N60 diodes I think I should have said
that I received silicon 1N60P diodes and that was
fraudulent sales baited by the titled 1N34A diodes.

On 03/17/2016 05:25 PM, Jim Simmons orion@... [regenrx] wrote:
>
> Rob,
> The 1N60 is a germanium diode, Not silicon. The characteristics are
> almost the same as the 1N34A. The main difference is that the 1N34A is
> a point contact germanium diode and the 1N60 is a gold-bonded contact
> germanium diode. In most cases the 1N60 can be substituted for the 1N34A.
>
> Jim ~ N5MSJ
>
>
> On 3/16/2016 9:22 PM, Rob roomberg@... [regenrx] wrote:
>>
>> ~snip~
>>
>> I found that when I tried to buy 1N34A diodes in bulk I received
>> silicon 1N60 diodes.
>> Hundreds of them from sources saying they were germanium.
>> Its a language barrier problem somewhere.
>> Its the only component I got the wrong part... more than once, out of
>> hundreds of different components
>> I bought last year.
>> So when these germanium transistors arrive I will get to play with a
>> repeatable and sharable
>> circuit.
>>
>>
>
>

26043. Re: [regenrx] Capitalism at its finest. 1N34A FRAUD

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-18 18:14:38 UTC
From: Jim Simmons
Topic: 26020 Message: 26043

Rob,
I would say those diodes in picture "A", and all similar, are silicon diodes either 1N914, or similar type of silicon switching diode. Just misrepresented by the seller, or mislabeled by the manufacturer.

If you want to play around with computer logic circuits (AND and OR gates) these can be used to make those circuits and give a good understanding of how they work. They can also be used in place of mechanical switches to switch coils in and out of the circuit for the regenerative receivers. So the purchase isn't a total loss.

Jim ~ N5MSJ

On 3/18/2016 7:37 AM, Rob roomberg@... [regenrx] wrote:
>
> Check out this picture of four diodes.
> http://www.learnmorsecode.com/help/diodes.jpg
>
> The goal was to buy 100 1N34A diodes to donate to a kids
> gig....Community Safety Day...last May.
> I figured parts were pennies so I wanted to donate 100 crystal radios
> to the educational cause.
> I bought a hundred diodes on a sale titled 1N34A germanium diodes on EBAY.
> The diodes arrived and they were definitely not catwhisker diodes.
> They are marked "A" in the picture.
>
> I bought other 100 diode batches that had black and blue and green
> stripes and no markings
> printed on them. They looked like silicon diodes to me. All frauds....
> sales titled 1N34A germanium diodes.
> So just out of curiosity I bought a sale titled 1N60 germanium diode
> and again I got the green stripe diode
> the same as the "A" diode.
>
> Then forum wizards told me to buy from
> https://www.mikeselectronicparts.com
> so I bought the 1N60 diodes marked "B" in the picture.
> They were germanium catwhisker diodes.
> But they cost 45 cents each and that cost adds up fast when you want
> to buy a 1,000 diodes so
> I kept hammering the EBAY sales until I found a Bulgarian source that
> was 2AA113 diodes....marked "C"
> in the picture that sold for a nickel per diode.
>
> So just for giggles I bought 1N60P diodes ..."D" in the
> picture......and they were marked 1N60P.

> That sort of etched in stone the fact that the green stripe fraud
> diodes were 1N60P silicon diodes.
>
> I'm not an electrical engineer with a test bench that can tell me WHAT
> the unmarked diodes are so
> my one and only test was to place the diodes into the circuit in my
> crystal radio.
> The tiny diodes were stone dead quiet.
> All of the catwhisker diodes played loud and clear AM broadcast radio
> stations unless they were physically defective with
> the cat whisker not maker contact with the flat plate of germanium.
>
> As I collected this stash of diodes I was told that I can bias the
> silicon diodes with one AA battery and they will come to
> life and receive AM radio.
> So I experimented with a dozen different diodes and received broadcast
> radio stations from around the world
> with 1N4148 diodes.
> It was a very interesting learning experience which sent me down the
> regenerative receiver path
> because I wanted to know more about HOW this worked, not just build
> receivers.
>
> http://www.learnmorsecode.com/help/xtal1.html
>
>
> So when I said I received silicon 1N60 diodes I think I should have
> said that I received silicon 1N60P diodes and that was
> fraudulent sales baited by the titled 1N34A diodes.
>
>
>
> On 03/17/2016 05:25 PM, Jim Simmons orion@... [regenrx] wrote:
>>
>> Rob,
>> The 1N60 is a germanium diode, Not silicon. The characteristics are
>> almost the same as the 1N34A. The main difference is that the 1N34A
>> is a point contact germanium diode and the 1N60 is a gold-bonded
>> contact germanium diode. In most cases the 1N60 can be substituted
>> for the 1N34A.
>>
>> Jim ~ N5MSJ
>>
>>
>> On 3/16/2016 9:22 PM, Rob roomberg@... [regenrx] wrote:
>>>
>>> ~snip~
>>>
>>> I found that when I tried to buy 1N34A diodes in bulk I received
>>> silicon 1N60 diodes.

>>> Hundreds of them from sources saying they were germanium.
>>> Its a language barrier problem somewhere.
>>> Its the only component I got the wrong part... more than once, out
>>> of hundreds of different components
>>> I bought last year.
>>> So when these germanium transistors arrive I will get to play with a
>>> repeatable and sharable
>>> circuit.
>>>
>>>
>>
>
>

26044. Re: [regenrx] Capitalism at its finest. 1N34A FRAUD

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-18 18:29:11 UTC
From: Jim Simmons
Topic: 26020 Message: 26044

Rob,
I was going to mention that the BAT41 Small Signal Schottky Diode is a very good substitute for the IN34A germanium diode. It has better specs, and it's price is low, but the SEND key got in too fast. Do a search on this diode.

Jim ~ N5MSJ

On 3/18/2016 1:14 PM, Jim Simmons orion@... [regenrx] wrote:
>
> Rob,
> I would say those diodes in picture "A", and all similar, are silicon
> diodes either 1N914, or similar type of silicon switching diode. Just
> misrepresented by the seller, or mislabeled by the manufacturer.
>
> If you want to play around with computer logic circuits (AND and OR
> gates) these can be used to make those circuits and give a good
> understanding of how they work. They can also be used in place of
> mechanical switches to switch coils in and out of the circuit for the
> regenerative receivers. So the purchase isn't a total loss.
>
> Jim ~ N5MSJ
>
> On 3/18/2016 7:37 AM, Rob roomberg@... [regenrx] wrote:
>>
>> Check out this picture of four diodes.
>> http://www.learnmorsecode.com/help/diodes.jpg
>>
>> The goal was to buy 100 1N34A diodes to donate to a kids
>> gig....Community Safety Day...last May.
>> I figured parts were pennies so I wanted to donate 100 crystal radios
>> to the educational cause.
>> I bought a hundred diodes on a sale titled 1N34A germanium diodes on
>> EBAY.
>> The diodes arrived and they were definitely not catwhisker diodes.
>> They are marked "A" in the picture.
>>
>> I bought other 100 diode batches that had black and blue and green
>> stripes and no markings
>> printed on them. They looked like silicon diodes to me. All
>> frauds.... sales titled 1N34A germanium diodes.
>> So just out of curiosity I bought a sale titled 1N60 germanium diode
>> and again I got the green stripe diode
>> the same as the "A" diode.
>>

>> Then forum wizards told me to buy from
>> https://www.mikeselectronicparts.com
>> so I bought the 1N60 diodes marked "B" in the picture.
>> They were germanium catwhisker diodes.
>> But they cost 45 cents each and that cost adds up fast when you want
>> to buy a 1,000 diodes so
>> I kept hammering the EBAY sales until I found a Bulgarian source that
>> was 2AA113 diodes....marked "C"
>> in the picture that sold for a nickel per diode.
>>
>> So just for giggles I bought 1N60P diodes ..."D" in the
>> picture......and they were marked 1N60P.
>> That sort of etched in stone the fact that the green stripe fraud
>> diodes were 1N60P silicon diodes.
>>
>> I'm not an electrical engineer with a test bench that can tell me
>> WHAT the unmarked diodes are so
>> my one and only test was to place the diodes into the circuit in my
>> crystal radio.
>> The tiny diodes were stone dead quiet.
>> All of the catwhisker diodes played loud and clear AM broadcast radio
>> stations unless they were physically defective with
>> the cat whisker not maker contact with the flat plate of germanium.
>>
>> As I collected this stash of diodes I was told that I can bias the
>> silicon diodes with one AA battery and they will come to
>> life and receive AM radio.
>> So I experimented with a dozen different diodes and received
>> broadcast radio stations from around the world
>> with 1N4148 diodes.
>> It was a very interesting learning experience which sent me down the
>> regenerative receiver path
>> because I wanted to know more about HOW this worked, not just build
>> receivers.
>>
>> http://www.learnmorsecode.com/help/xtal1.html
>>
>>
>> So when I said I received silicon 1N60 diodes I think I should have
>> said that I received silicon 1N60P diodes and that was
>> fraudulent sales baited by the titled 1N34A diodes.
>>
>>
>>
>> On 03/17/2016 05:25 PM, Jim Simmons orion@... [regenrx] wrote:
>>>
>>> Rob,
>>> The 1N60 is a germanium diode, Not silicon. The characteristics are
>>> almost the same as the 1N34A. The main difference is that the 1N34A
>>> is a point contact germanium diode and the 1N60 is a gold-bonded

>>> contact germanium diode. In most cases the 1N60 can be substituted
>>> for the 1N34A.
>>>
>>> Jim ~ N5MSJ
>>>
>>>
>>> On 3/16/2016 9:22 PM, Rob roomberg@... [regenrx] wrote:
>>>>
>>>> ~snip~
>>>>
>>>> I found that when I tried to buy 1N34A diodes in bulk I received
>>>> silicon 1N60 diodes.
>>>> Hundreds of them from sources saying they were germanium.
>>>> Its a language barrier problem somewhere.
>>>> Its the only component I got the wrong part... more than once, out
>>>> of hundreds of different components
>>>> I bought last year.
>>>> So when these germanium transistors arrive I will get to play with
>>>> a repeatable and sharable
>>>> circuit.
>>>>
>>>>
>>>
>>
>
>

26045. Small Signal Diodes - Germanium, Silicon, Schottky.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-19 03:29:05 UTC
From: les.au49@...
Topic: 26045 Message: 26045

A key characteristic of the 1N34A germanium diode is the low forward voltage drop and reverse capacitance (1pF - according to the spec sheet.) The only Schottky diode with comparable reverse capacitance is the BAT41 (2pF).

The other members of the BAT family have a higher reverse "C" - up to 10pF.
I couldn't find the forward voltage drop for a germanium point contact diode at a low current - the figure given for 200mA is 1V and we know it's less than that at 1mA. Looking at the datasheets for the BATnn devices, the lowest forward voltage drop is in the order of 300mV at 1 mA.

More datasheets (and the diodes themselves) are found at Futurlec - http://www.Futurlec.com http://www.Futurlec.com
Just use the search box at the top left to find an item of interest.
I've bought components from Futurlec for many years. Sometimes they mix up an order - and they aren't always fast, but they will always sort out any problem.

I renamed this thread to reflect the topic better.

Les

26046. Re: [regenrx] Small Signal Diodes - Germanium, Silicon, Schottky.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-19 03:54:35 UTC
From: Jim Wiley
Topic: 26045 Message: 26046

Also, take a look at the 1N5711 Schottky signal diode.

1N5711 diodes make an acceptable replacement for the 1N34A. They feature low capacitance (2 pF or less), low forward drop (0.1 to 0.4 volts depending on various factors), are readily available from Mouser and other vendors, and are relatively inexpensive. They are also very fast, suitable for use as UHF detectors. I have used them successfully as replacements in the front-end mixer of a -hp- spectrum analyzer (don't ask why I know this!) They also perform well as the detector for a "crystal" radio.

Less than 50 cents each in single quantities, less than 12 cents each in 100's.

- Jim, KL7CC

On 3/18/2016 7:29 PM, les.au49@... [regenrx] wrote:
>
> A key characteristic of the 1N34A germanium diode is the low forward
> voltage drop and reverse capacitance (1pF - according to the spec
> sheet.) The only Schottky diode with comparable reverse capacitance
> is the BAT41 (2pF).
>
>

26047. Re: Small Signal Diodes - Germanium, Silicon, Schottky.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-19 05:23:28 UTC
From: les.au49@...
Topic: 26045 Message: 26047

Well done Jim - and I WON'T ask how you know they work well in HP spectrum analyzers!

At Futurlec (notice the absent "e" they are $0.10 each. I always buy a few dozen so the packer doesn't get bored walking to the parts drawer!

Les

26048. Small Signal Diodes - Germanium, Silicon, Schottky.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-19 19:05:17 UTC
From: Rob
Topic: 26045 Message: 26048

Yes... I did get to experiment with an array of Schottky diodes in my
search for
a cheap 1N34A replacement last year.
This:
Match box crystal radio by Billy Cheung
https://www.youtube.com/watch?v=_7of69KW-JM
uses
1SS106 diodes.

Once I heard them receive on the simple crystal radio I also bought
the SMD versions of them and others.. 1N5711......
because I wanted to showNtell the scouts that what started as a cat
whisker rock detector
and oatmeal box size coil ......COULD be miniaturized into a JAMES BOND 007
package the size of a bottle cap using molded inductors and an SMD 1N5711.
It truly was a learning experience for me that led to the conclusion
that YES we can build crystal radios for pennies for the kids.... and
for $2 when
adding the LM386 amplifier boards to drive magnetic ear buds or headphones.
Air tuning capacitors and crystal ear phones became the cost prohibitive
parts
so I got past the air cap cost with home brew air caps.... just some
artsNcrafts tin foil
and wax paper.

All in all the mission was one of inspiration for the kids to want to
play with radio electronics
while at the same time the parents not getting bitten by a high price tag.
Show a parent a $3 toy that keeps a kid busy with science
or
show a parent a $100 video game
and you can bet they buy into science over gaming... especially when
they only have $20 in their pocket.
So I figured that if our radio club donated to the educational cause and
gave away cheap radios then
we might inspire some kids to do more.
When the parents then go look to buy short wave radios and see $1,000
price tags then
we show them how to build regenerative receivers with their kids and
really hear the world.

On 03/18/2016 11:54 PM, Jim Wiley jwiley@... [regenrx] wrote:
>
> Also, take a look at the 1N5711 Schottky signal diode.
>
> 1N5711 diodes make an acceptable replacement for the 1N34A. They

> feature low capacitance (2 pF or less), low forward drop (0.1 to 0.4
> volts depending on various factors), are readily available from Mouser
> and other vendors, and are relatively inexpensive. They are also very
> fast, suitable for use as UHF detectors. I have used them
> successfully as replacements in the front-end mixer of a -hp- spectrum
> analyzer (don't ask why I know this!) They also perform well as the
> detector for a "crystal" radio.
>
> Less than 50 cents each in single quantities, less than 12 cents each
> in 100's.
>
> - Jim, KL7CC
>
>
>
> On 3/18/2016 7:29 PM, les.au49@... [regenrx] wrote:
>>
>> A key characteristic of the 1N34A germanium diode is the low forward
>> voltage drop and reverse capacitance (1pF - according to the spec
>> sheet.) The only Schottky diode with comparable reverse capacitance
>> is the BAT41 (2pF).
>>
>>
>
>

26049. RE: [regenrx] Small Signal Diodes - Germanium, Silicon, Schottky.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-19 22:39:08 UTC
From: Hubert Miller
Topic: 26045 Message: 26049

Les – i’m glad you gave the reverse capacitance of the diodes also. That reminded me that this may be something to keep in mind

for HF detectors. At 10 MHz for example, a mere 1 pF is about 15,000 ohms equivalent; while only 5 pF is all the way down to around

3000 ohms.

-Hue

26050. Re: 6LM8-6GH8 & 6JT8-6AU8 receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-21 02:05:58 UTC
From: norm_n_tam@...
Topic: 3264 Message: 26050

Buy the PCB for the radio here:

http://www.ebay.com/itm/Multi-Purpose-PCB-for-Single-Tube-Operation-/331794971094?hash=item4d408579d6:g:H-MAAOSwirZTsBCt http://www.ebay.com/itm/Multi-Purpose-PCB-for-Single-Tube-Operation-/331794971094?hash=item4d408579d6:g:H-MAAOSwirZTsBCt

It's extremely customization and will allow you to build a radio circuit using just about any 9 pin tube!

26051. Re: 6LM8-6GH8 & 6JT8-6AU8 receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-21 02:08:28 UTC
From: norm_n_tam@...
Topic: 3264 Message: 26051

Buy the PCB for the radio here:

Multi Purpose PCB for Single Tube Operation http://www.ebay.com/itm/Multi-Purpose-PCB-for-Single-Tube-Operation-/331794971094?hash=item4d408579d6:g:H-MAAOSwirZTsBCt

http://www.ebay.com/itm/Multi-Purpose-PCB-for-Single-Tube-Operation-/331794971094?hash=item4d408579d6:g:H-MAAOSwirZTsBCt

Multi Purpose PCB for Single Tube Operation http://www.ebay.com/itm/Multi-Purpose-PCB-for-Single-Tube-Operation-/331794971094?hash=item4d408579d6:g:H-MAAOSwirZTsBCt in Consumer Electronics, Vintage Electronics, Vintage Audio & Video

View on www.ebay.com http://www.ebay.com/itm/Multi-Purpose-PCB-for-Single-Tube-Operation-/331794971094?hash=item4d408579d6:g:H-MAAOSwirZTsBCt
Preview by Yahoo

It's very customize, and will permit you to build a radio circuit using just about any 9 pin tube!

26052. 6 meter one tube regen receiver and 2 watt AM transmitter

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-21 03:55:56 UTC
From: Alvin Schmitt
Topic: 26052 Message: 26052

http://www.americanradiohistory.com/Archive-Poptronics/60s/62/Pop-1962-08.pdf page 45. Alvin P. Schmitt

APSTRON LLC
P.O. Box 201Newport VA 24128-0201

1-888-730-6478
http://www.apsministries.org/

26053. Pop Electronics coil winding jig

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-21 13:33:08 UTC
From: Alvin Schmitt
Topic: 26053 Message: 26053

http://www.americanradiohistory.com/Archive-Poptronics/50s/54/Pop-1954-12.pdf Page 58 Alvin P. Schmitt

APSTRON LLC
P.O. Box 201Newport VA 24128-0201

1-888-730-6478
http://www.apsministries.org/

26054. Sencore Harmonic Gen,

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-22 18:59:07 UTC
From: Daniel Donnelly
Topic: 26054 Message: 26054

I recently acquired a Sencore Harmonic Gen. HG 104 without the batteries. Nothing was marked on the battery holder and the instruction book does not have a a drawing or define which end of the battery holder is positive. Could someone please tell me the correct battery polarity to connect to the power switch?
Thanks
Dan

26055. Re: Sencore Harmonic Gen,

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-22 22:51:18 UTC
From: les.au49@...
Topic: 26054 Message: 26055

Hi Daniel,

Have a photo of the "insides".
If you send an e-m to me, Les-dot-au49 (at) Yahoo etc, you'll see the batteries on one of these.

Les

26056. Fwd: REGENERODYNE RECEIVER

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-28 22:38:39 UTC
From: Prof. Arnaldo Coro Antich
Topic: 26056 Message: 26056

-

The SWLing Post

The SWLing Post <http://swling.com/blog>

The KRC-2 shortwave regenerative receiver kit
<http://feedproxy.google.com/%7Er/TheSwlingPost/%7E3/uRX79fL9W6Q/?utm_source=feedburner&utm_medium=email>

Posted: 28 Mar 2016 09:52 AM PDT

Tony Westbrook recently contacted me about a regenerative receiver kit he has designed and produced in the UK. It's called the KRC-2 <http://www.kitradio.co.uk/page10.htm>. Here's the product description:

/1 – 30 MHz with band spread tuning./

/Regeneration with a difference. The regeneration setting on the KRC-2 is unaffected by the receiver tuning or the antenna coupling. How do we achieve this? The regenerative stage is fixed at 10.7MHz and used as an IF amplifier. The main receiver board is extremely simple to construct using only one FET and an audio IC. Like all the KRC kits it comes with a comprehensive construction manual which brings this project well within the grasp of the keen constructor. It was referred to as "a very sensitive little receiver" by Rob Mannion of Practical Wireless. Its unconventional design and simplicity should amaze even the experienced constructor. Case size 7 x 4 x 3 inches. 6 x AA batteries supplied./

According to Tony, the kit comes with everything; UK orders are even supplied with batteries. Tony stated, "the only thing the customer needs is a soldering iron, solder cutters, etc."

By request, Tony sent a few construction photos and three videos of the radio in operation:

*
*

26057. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-28 23:02:15 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 26057

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Leonard's Stuff/Mk 23 Mod 2.bmp
Uploaded by : leonardmeek <lemeek@...>
Description : Mk.23 Mod 2 Update

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Leonard%27s%20Stuff/Mk%2023%20Mod%202.bmp

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

leonardmeek <lemeek@...>

26058. Mk.23 Mod 2

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-28 23:18:04 UTC
From: Leonard Meek
Topic: 26058 Message: 26058

I just uploaded an update of my Mk.23 regenodyne.It's still pretty much the same except for some component values. Note the 1 Meg plate load resistor in the detector. That came by cut & try. It gave the most gain, but I'll probably find out at what cost later. I changed the osc/buffer to a 12AU7. It fit the calculations better and gave a much smoother output. Following Dave's and Prof. Coro's recommendations, I moved the AF gain control to the 2nd audio stage. I feel confident enough now to tackle a really BIG regenodyne project.

26059. RE: REGENERODYNE RECEIVER (KCR-2)

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-28 23:43:19 UTC
From: Hubert Miller
Topic: 26059 Message: 26059

Hey, thanks Arnie, for posting this. I have been thinking about this one for about ten years.

The photos and vids on the links you sent are better and more informative than those on

Kit Radio Company’s own site.

The exhange rate UKP: dollars is rather high, so the radio is not a bargain price item here,

compared to that kit offered in the US by that radio club.

I’m still procrastinating – but regretting it now – KCR had a matching transmitter, a low

power rig the same size as this receiver – but they discontinued it. That would have made

a nice looking small QRP station.

Arnie, your post reminds me to ask at our Post Office, if we can now mail things like bags

of FETs or variable capacitors and such, now that mail connections have been restored.

-Hue Miller

Newport, Oregon USA

26060. Can anyone use these new headphones?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-30 01:14:45 UTC
From: Bry Carling
Topic: 26060 Message: 26060

FOR SALE: H113/U Military Headset

New old stock. Perfect shape. This is a top quality Medium / High Z, 600 ohm head set by Audiosears.

Very nice, functional military memorabilia. New in original packaging and box. Unused. Well below eBay prices.

Available for $25.00 plus shipping

26061. Re: [regenrx] Can anyone use these new headphones?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-03-30 06:55:54 UTC
From: Sam Neal
Topic: 26060 Message: 26061

------ Original Message ------
Received: 08:15 PM CDT, 03/29/2016
From: "Bry Carling af4k@... [regenrx]" <regenrx@yahoogroups.com>
To: "regenrx@yahoogroups.com" <regenrx@yahoogroups.com>
Subject: [regenrx] Can anyone use these new headphones?

FOR SALE: H113/U Military Headset

New old stock. Perfect shape. This is a top quality Medium / High Z, 600 ohm head set by Audiosears.

Very nice, functional military memorabilia. New in original packaging and box. Unused. Well below eBay prices.

Available for $25.00 plus shipping

Hello,

I will take them. More tomorrow.

73,

Sam Neal. N5AF

26062. Review on the "Isolated" Variac I bought (another long ramble)

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-02 19:24:35 UTC
From: Phil
Topic: 26062 Message: 26062

First, let me say that I wanted to purchase BOTH a variac & an isolation transformer. My workbench is relatively small, 48" wide and 24" deep, with a pegboard back for tools and an overhead shelf (with fluorescent lamp on the under side) that is ideal for holding test equipment. On that shelf left to right is a Heathkit LG-1 Sig Gen, Heath IM-21 AC VTVM, Heath V-7A VTVM, Heath IT-12 Sig Tracer, Leader LSG-17 Sig Gen and finally TWO metered "Tekpower TP-3005D" 0-30V 5 Amp regulated Power Supplies. Those Power Supplies are the latest addition to the bench and let me say, they are ABSOLUTELY WONDERFUL! Separate digital meters for Voltage/Current, they have adjustable current limiting. Cooling fan comes on when you put enough load on it to heat it up a bit. You can hear relays switching transformer 'taps' as you vary the output Voltage across it's range (that reduces the workload heat stress on the series pass transistors.

On a separate cart next to the bench is the B&K O'scope, 2.4GHz Frequency Counter, Volteq SFG2002 Function Generator (to take care of stuff below the range of the Heath & Leader Sig Gens). And finally a RadioShack 13.6V 19 Amp supply to work on larger radios.

So my bench is (Finally) pretty well equipped, the only thing that was really lacking was a tube tester (some day down the road) and a variac/Isolation transformer.
****

But this is REALLY about the Variac I bought, both the good and the bad!

I needed both a Variac and an Isolation Xformer, but like I said, don't have a big bench. I REALLY figured that a 500va unit would be MORE than large enough as I DON'T do tube transmitters and such now-a-days (can't man-handle them, not even a boatanchor like an R-390A etc

While shopping (for new, I don't do eBay) I ran across ONE unit that combined BOTH an isolation Xformer AND a Variac. It was called an "Isolation Variac", BUT at about 1000va it was larger and heavier than I really needed. But for convenience I decided to buy it anyway. Reviews indicated that it IS a TRUE ISOLATION transformer.

This is the unit I bought. . .
http://www.amazon.com/Variac-Variable-Transformer-Isolation-1000va/dp/B006NGC6HU?ie=UTF8&redirect=true&ref_=ya_st_dp_summary

I read the reviews, both good and bad and decided to buy it anyway, figuring if it DID have problems I could fix it or return it. ONE of the things that repeatedly came up in reviews was a "wobbly shaft and excessive knob height". I figured I could probably take care of that IF mine had those bad 'features'. It did. . .

****

When it arrived I was a bit surprised, the unit is larger and HEAVIER than I expected (about 21 lbs). And like others said, it "STUNK" with a capital S. That doesn't bother me, a lot of the Chinese stuff I've bought stunk when first opened but it dissipates fairly quickly.
****

Examination showed that YES, it did have a 'WOBBLY SHAFT'. After making SURE that the unit was fine electrically, no sparks, or bad/bouncing readings when adjusting the Voltage (in other words, good contact between wiper and transformer windings) I then checked to make SURE that it is truly an 'Isolated' variac. IT IS, there is NO continuity between the primary and secondary windings. ONLY the round ground pin from the AC line input is fed through to the outlet. I feel that is a GOOD thing as it's only a safety ground, but important.

I used my DVM to compare the actual Voltage output against that which the analog meter showed. I checked it at BOTH 50 & 110 Volts output. As close as I could read the small analog meter the readings were DEAD ON accurate. That was a surprise!

NOTE: Some reviewers have said that the Voltage output doesn't correspond to the knob reading. DUH!! First, the arrow on the knob doesn't line up with '0' when it's turned all the way down. SECONDARILY, actual Voltage output will depend on what you put into it. Some people have NO CLUE. . .
****

NOW TO SEE ABOUT FIXING THAT WOBBLE!
Having determined the unit is working correctly, no obvious electrical problems, I pulled the knob and examined the "Wiper assembly" to see why it wobbled (the shaft goes all the way through the unit and is visible from the bottom. Appears to have a lower bearing OK.

The "wiper" is on a husky piece of plastic (think it's white Nylon). There are two metal inserts on that plastic thingy, and two setscrews that are threaded into the metal inserts. NOT easy to get a screwdriver in to check their tightness.
****

HERE'S HOW I FIXED THE SHAFT WOBBLE. . .

1. I found that taking two screws out of the front panel that holds the meter, switch and outlet there is a nice large hole that allows access to the setscrews and upper shaft. I checked, one setscrew was loose, the other one not as tight to the shaft as it could have been.

2. I loosened the second screw, pushed DOWN on the wiper assembly and tightened the set screws. This alone took most of the wobble out of the shaft, still had a little bit as it doesn't have a true bearing at the top.

3. Examination showed that I could probably make it better though. I found a round piece of phenolic about 2.75 inches in diameter and 1/8 inch thick. I drilled a hole in the center and slid it down over the shaft. This was to act as a washer or "rubbing surface" for the knob (there are three screws in the top, under the knob that would otherwise rub).

4. I then drilled the knob shaft hole ALL the way through the knob. This allowed pushing the knob further down the shaft so that it was actually lightly rubbing on the phenolic washer. In this position the shaft protrudes out the top of the knob maybe 1/16th inch, perfectly tolerable!

5. Checked ALL my work, VOILA! Almost NO shaft wobble at all. Remounted the front meter panel with it's two screws. While it was off I checked the Chinese soldering, ALL soldering looked VERY good for Chinese workmanship!

6. I then checked to make SURE that there were no Voltage glitches or dropouts throughout the knob range, there weren't!
****

OK, if I were giving this a "star rating" (5 star scale), how would I rate it??????????????

As it came from the factory with the shaft wobble etc I would rate it a '3' as I feel that would probably affect long term reliability.

AS IT IS NOW AFTER THE MODS, IF THE FACTORY SHIPPED IT LIKE THIS I WOULD RATE IT A FULL '5 STARS'. . .

--
73 From "The Beaconeer's Lair"
Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)

PRESENT HF/LF RADIOS:
Grundigs: S-350 (~2006), G6 (2011) & S450DLX (2014).
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
Icom: IC-735 Transceiver (~1990).
Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
Icom: IC-7200 Transceiver (~2015).
R-Shack: DX-380 digital portable (~1990).
SDR: Softrock Ensemble II LF (built from a kit 2015).
Zenith: Royal-7000 Transoceanic Portable (~1968).

ACCESSORIES: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 8 Hz Audio Filter.

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

26063. re: RAL again

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-02 20:02:19 UTC
From: Hubert Miller
Topic: 26063 Message: 26063

Richard – old mail – but – where did you put the audio level control?
I don’t have an RAL handy – but i think maybe at the ‘audio limiter’ control?

What size pot, and where in circuit did you place this.

I have 2 RAL in storage, which i will try to sell at a Pacific Northwest hamfest – big boxes have to go first, so i can keep some of the smaller boxes.

tnx

-Hue Miller

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Sunday, April 26, 2015 7:17 AM
Subject: Re: [regenrx] Re: regen for 600 meter band

“.........The RAK and RAL have capacitors plate to ground in the audio stages to roll-off the audio response, which is fine for CW and MCW, but severely limits voice reception. I removed them in the RAL's and then had a vicious ultrasonic oscillation due to 5 feet of unshielded low-level audio wiring. I shielded the wiring, and added a shield to the 41 output stage which oscillated because it was "looking" at nearby low-level wiring. I now had an imbalance between RF and AF gain, and added an AF gain control. Now SSB sounds better than in my superhetrodyne receivers, and AM is ‘OK’ “.
Richard, AA1P

26064. RE: [regenrx] Re: regen for 600 meter band

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-02 20:18:05 UTC
From: Hubert Miller
Topic: 23410 Message: 26064

Again, old mail i’m going thru, maybe i have posted on this.

What you say about off-tuning a single tuned circuit regen on VLF-LF SHOULD decrease the received signal a lot, in fact, greatly.

But i recall long ago i used a single 6J5 triode regen and received, in Seattle USA on the west coast USA, NPM Hawaii on something

like 19 kHz. They DID have a lot of power, i recall the QSL i had from them said 500 kW. I think i also heard NBA Panama and NSS

east coast. I recall i talked to another Seattle fellow who was using a 3-transistor receiver, single tuned circuit, and he had a list

of international VLF stations he was able to receive.

How and why these simple receivers worked as well on VLF, i can’t explain; it’s now kind of a mystery to me.

Maybe it’s just because the sending stations had such high power.

I recall in Seattle using a Frequency Selective Voltmeter and tuning across the frequency of NLK (near Arlington, Washington state,

less than 120 km from Seattle) and the needle on the voltmeter indicator would jump way up. I think i also heard NLK teletype

transmission sound on some rural telephones.

I suppose you’re right about the need then for an RF amp stage at VLF-LF.

Some manufacturers’ engineers were aware of the challenge.

I have a Marconi 730 which for receiving UK station GBR, has a switch position to throw in a beat oscillator, which is only used for

receiving GBR.

-Hue Miller

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Sunday, April 26, 2015 4:47 AM
To: regenrx@yahoogroups.com
Subject: [regenrx] Re: regen for 600 meter band

“Until now my conclusion is, if the frequency is too low, a regen receiver used for cw without selective preamp would be deaf. For am on LW it only would cut off the sidebands. In 2012 i tried to receive the SAQ on 17.2 kHz. The distance is not very far from here, but a single stage regen receiver didn't work at all. With a Q=1000 the bandwidth is as low as

17 Hz. I had to tune the autodyne frequency to 16700 Hz. Tuned to this frequency a regenerative circuit has no amplifacation on 17200, but the noise of the grid leak resistor is still there. Later i tried my luck with a dc-receiver. In the meantime the regen stage had been changed into a tuned q-multiplier, then mixing down to audio. The signal was loud and clear. This circuit is still working well, also the alphas can be heard. “
Regards,

_’___

26065. RE: [regenrx] Review on the "Isolated" Variac I bought (another long ramble)

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-02 20:25:59 UTC
From: Hubert Miller
Topic: 26062 Message: 26065

Good info, Phil !
I'll have to look into the highvoltage supply you use. I have a couple Fluke 407 and a Heathkit supply; they're all vac tube regulated so they're kind of large.
Also, do your signal generators actually tell you the microvolts output? I have a URM-25E which is a nice machine, but it weighs a lot (about 35 lbs.) and
i have read that it also can be hard to service (repair).
-Hue Miller

26066. Re: [regenrx] re: RAL again

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-02 23:28:32 UTC
From: Richard
Topic: 26063 Message: 26066

Hue, OM:
I replaced the 6D6 1'st audio grid resistor with a pot, 100 K, and connected the wiper to the grid. I put it in the hole for the "DC Power" switch, which is easily replace if one would want to. There is a hole in the chassis near-by to route shielded wires to the top. The grid resistor is mounted behind the panel in the top right quadrant.

There is no difference in performance with ac or dc on the heaters, but I use dc, "just because." Actually, on ac there is a wee bit of hum picked up by the inductors in the low-pass audio filter from the magnetic field from the heater wiring, which disappears when the filter is switched out. The instruction book notes this wee hum as an indication the receiver is working correctly...

Richard, AA1P

On 04/02/2016 04:02 PM, Hubert Miller kargo_cult@... [regenrx] wrote:
>
> Richard – old mail – but – where did you put the audio level control?
> I don’t have an RAL handy – but i think maybe at the ‘audio limiter’
> control?
>
> What size pot, and where in circuit did you place this.
>
> I have 2 RAL in storage, which i will try to sell at a Pacific
> Northwest hamfest – big boxes have to go first, so i can keep some of
> the smaller boxes.
>
> tnx
>
> -Hue Miller
>
> *From:*regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
> *Sent:* Sunday, April 26, 2015 7:17 AM
> *Subject:* Re: [regenrx] Re: regen for 600 meter band
>
> “.........The RAK and RAL have capacitors plate to ground in the audio
> stages to roll-off the audio response, which is fine for CW and MCW,
> but severely limits voice reception. I removed them in the RAL's and
> then had a vicious ultrasonic oscillation due to 5 feet of unshielded
> low-level audio wiring. I shielded the wiring, and added a shield to
> the 41 output stage which oscillated because it was "looking" at
> nearby low-level wiring. I now had an imbalance between RF and AF
> gain, and added an AF gain control. Now SSB sounds better than in my
> superhetrodyne receivers, and AM is ‘OK’ “.
> Richard, AA1P

>
>

26067. Hmmm, now what do I do with that "DBT" I built???

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-03 21:48:21 UTC
From: Phil
Topic: 26067 Message: 26067

Perhaps a year or so ago I built a very nice "DBT" (Dim Bulb Tester) in one of those classy little aluminum and fiber Cases that Harbor 'Fright' sells. Went the extra mile to make it nice, lamp socket in the lid, double duplex box with a power switch and outlet, 3 wire power cord and of course storage for a few light bulbs.

With the new isolated variac it's not likely it'll get much use, but it's way too nice to "part out", cost too much to make it worth the cost of selling it/shipping it, etc.

Guess I'll hang on to it either as a curiosity or for some "quick testing" of some questionable device.

Perhaps if I run across a neophyte BA enthusiast in the local area I'll pass it on to him. . .

--
73 From "The Beaconeer's Lair"
Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)

PRESENT HF/LF RADIOS:
Grundigs: S-350 (~2006), G6 (2011) & S450DLX (2014).
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
Icom: IC-735 Transceiver (~1990).
Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
Icom: IC-7200 Transceiver (~2015).
R-Shack: DX-380 digital portable (~1990).
SDR: Softrock Ensemble II LF (built from a kit 2015).
Zenith: Royal-7000 Transoceanic Portable (~1968).

ACCESSORIES: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 8 Hz Audio Filter.

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

26068. Re: [regenrx] Hmmm, now what do I do with that "DBT" I built???

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-03 22:38:53 UTC
From: msalbert@...
Topic: 26067 Message: 26068

I'm always looking for boxes and homebrew ideas. Yours sounds cool, Got a link to the box you used, or maybe a picture? Regards, Mark KB9VKE -----Original Message----- From: Phil ko6bb1@... [regenrx] To: Regen group Sent: Sun, Apr 3, 2016 04:48 PM Subject: [regenrx] Hmmm, now what do I do with that "DBT" I built??? Perhaps a year or so ago I built a very nice "DBT" (Dim Bulb Tester) in one of those classy little aluminum and fiber Cases that Harbor 'Fright' sells. Went the extra mile to make it nice, lamp socket in the lid, double duplex box with a power switch and outlet, 3 wire power cord and of course storage for a few light bulbs. With the new isolated variac it's not likely it'll get much use, but it's way too nice to "part out", cost too much to make it worth the cost of selling it/shipping it, etc. Guess I'll hang on to it either as a curiosity or for some "quick testing" of some questionable device. Perhaps if I run across a neophyte BA enthusiast in the local area I'll pass it on to him. . . -- 73 From "The Beaconeer's Lair" Phil, KO6BB http://www.qsl.net/ko6bb/ (Web Page) PRESENT HF/LF RADIOS: Grundigs: S-350 (~2006), G6 (2011) & S450DLX (2014). HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015) Icom: IC-735 Transceiver (~1990). Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009) Icom: IC-7200 Transceiver (~2015). R-Shack: DX-380 digital portable (~1990). SDR: Softrock Ensemble II LF (built from a kit 2015). Zenith: Royal-7000 Transoceanic Portable (~1968). ACCESSORIES: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner. HOMEBREW 8 Hz Audio Filter. ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW. Active Mini-Whip, 36 Feet AGL for LF/MW/SW. 37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW. Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh ---------- Posted by: Phil <ko6bb1@...> ---------- "In the interest of Regenerating radio's lost art of Regeneration" ---------- Yahoo Groups Links

26069. Completed construction of my Receiver Multicoupler today

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-04 03:51:22 UTC
From: Phil
Topic: 26069 Message: 26069

Hi All,
First you might ask what this has to do with regen receivers. Well, my regen is one of the receivers that will be connected to this critter :)

Sometime back I mentioned that I was building another multicoupler to allow multiple receivers to share the same antenna. Only this time I'm making a few changes and additions to it, most notably switchable BCB band rejection AND two LF to HF converters to allow receivers that don't normally tune the LF range, or don't do well down there to receive the LF range in the 4.0 to 4.5MHz range. Yes, I could have done the job with a single LF converter, but that would have complicated switching.

Here's the basic "specs" of the unit.
1. Frequency range is 10kHz to 30MHz (actually a bit more but that's the 3dB points of the splitter I used).

2. Switchable between two antenna inputs, one passive and one "active" to provide power to an active antenna such as as mini-whip.

3. 4 separate receiver outputs, each isolated from the others to prevent interaction. Two may have a switchable 4MHz LF converter switched in.

4. TWO switchable BCB reject filters (only one can be selected at a time). One is a 530KHz Low-Pass Filter, the other a 530-1600KHz band reject filter. That way I have the choice if I only want to listen below 530KHz, OR if I want to be able to listen to either LF & HF with no BCB IMD.

5. ALL RF switching, filter selection, LF Converter Selection, Antenna selection etc is accomplished via 12 Volt relays (7 of them). This GREATLY simplified wiring as it reduced the amount of open wires carrying RF, allows for greater isolation between inputs/outputs and so forth. All that's carried from the front panel switches is 12 Volts DC. The LPF on the main amplifier/splitter board is completely enclosed with grounded copper foil. I didn't go that far on the other modules, I ran out of foil.

6. Ideally a multicoupler should have little or no RF gain. As in the last coupler I built, I was shooting for about 0-6dB of gain, with a 50 Ohm 6dB pad between the amplifier output and the input to the splitter, primarily to insure a good impedance match. I haven't measured the exact gain on this one, but basic testing on a local beacon (FCH-344) shows that it's right in that range.

7. LF/HF Converter Gain. Basic tests with FCH-344 shows that there IS about a 10dB gain at 4.344MHz as compared to tuning it directly at

344kHz. That's using the Icom R-75 as the test receiver (the R-75 has had the LF attenuator bypassed).

8. The only controls are mini toggle switches for Main power, Active/passive antenna, BCB filter select (LPF/Off/Band Reject), RX1 LF converter, RX2 LF converter. EVERY switch has a different colored LED above it to indicate the status of the unit at a glance (love them LEDs).

9. The bench Power Supply metering showed that the unit draws about 180mA with everything switched on.

Tomorrow I plan to dig out my (new) Brother label maker and make labels for all the switches and connectors, put the top cover on the unit and then install it in the operating position. Then I can put it to the REAL test.

--
73 From "The Beaconeer's Lair"
Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)

PRESENT HF/LF RADIOS:
Grundigs: S-350 (~2006), G6 (2011) & S450DLX (2014).
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Icom: IC-735 Transceiver (~1990).
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Icom: IC-7200 Transceiver (~2015).
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SDR: Softrock Ensemble II LF (built from a kit 2015).
Zenith: Royal-7000 Transoceanic Portable (~1968).

ACCESSORIES: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
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ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

26070. Pictures of my latest creation, a 4 port Receiver Multi-coupler

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-04 20:04:17 UTC
From: Phil
Topic: 26070 Message: 26070

Hi All,
The other day I mentioned that I had basically completed building my latest 4 Port Multi-Coupler. Note, this device allows up to 4 receivers to share the same antenna wit no losses.

Today I labeled all the controls and buckled it up, installing it in the operating position. Just waiting for some 3 foot long BNC cables to arrive via UPS today to connect it all up.

Anyway, here is a link to the pictures I took (no Photobucket membership required to view). . .

http://s38.photobucket.com/user/ko6bb/library/KO6BB%204%20Port%20Receive%20Multi-Coupler-2016

Any and all comments & questions are welcomed. Schematics and information on the basic unit are in the home-brew section of my web site.

--
73 From "The Beaconeer's Lair"
Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)

PRESENT HF/LF RADIOS:
Grundigs: S-350 (~2006), G6 (2011) & S450DLX (2014).
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
Icom: IC-735 Transceiver (~1990).
Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
Icom: IC-7200 Transceiver (~2015).
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ACCESSORIES: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 8 Hz Audio Filter.

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
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37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

26071. Oscillator Circuits Receiver vs Transmitter

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-05 15:55:04 UTC
From: danyoder.cs@...
Topic: 26071 Message: 26071

Hi All,
Can someone explain to me the difference between lets say an Armstrong, or Colpitts oscillator circuit that is first being used in a regen, getting its source from the antenna and the LC filter, as apposed to a oscillator that is designed using a crystal or a tube and LC. Do they both have grid leak circuits and if so do they do the same thing?
Thanks Dan
W3DKY

26072. Re: [regenrx] Oscillator Circuits Receiver vs Transmitter

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-05 19:19:38 UTC
From: Bill Cromwell
Topic: 26071 Message: 26072

Hi Dan,

Regen detectors are oscillators with controlled positive feed back so that it can be almost oscillating or oscillating. Probably any oscillator design will work but apparently two or three designs lend themselves more readily to the feedback control. All oscillators have positive feedback. Negative feedback kills oscillation and is used for neutalizing amplifiers that we don't want oscillating.

There are a lot of oscillator designs and they are the same whether they are in a transmitter or a receiver. And whether they are xtal controlled or LC controlled or RC controlled. Whether they are keyed fo CW or left running all the time. Same-same.

Do you have something in mind for a project?

73,

Bill KU8H

On 04/05/2016 11:55 AM, danyoder.cs@... [regenrx] wrote:
>
> Hi All,
>
> Can someone explain to me the difference between lets say an
> Armstrong, or Colpitts oscillator circuit that is first being used in
> a regen, getting its source from the antenna and the LC filter, as
> apposed to a oscillator that is designed using a crystal or a tube and
> LC. Do they both have grid leak circuits and if so do they do the same
> thing?
>
> Thanks Dan
>
> W3DKY
>
>

26073. Re: [regenrx] Can anyone use these new headphones?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-06 02:58:30 UTC
From: Sam Neal
Topic: 26060 Message: 26073

Hello Bry,

If you still have them, I will take them.

Sam Neal N5AF

------ Original Message ------
Received: Tue, 29 Mar 2016 08:15:12 PM CDT
From: "Bry Carling af4k@... [regenrx]" <regenrx@yahoogroups.com>
To: "regenrx@yahoogroups.com" <regenrx@yahoogroups.com>
Subject: [regenrx] Can anyone use these new headphones?

FOR SALE: H113/U Military Headset

New old stock. Perfect shape. This is a top quality Medium / High Z, 600 ohm head set by Audiosears.

Very nice, functional military memorabilia. New in original packaging and box. Unused. Well below eBay prices.

Available for $25.00 plus shipping

26074. Re: [regenrx] Oscillator Circuits Receiver vs Transmitter

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-06 15:44:37 UTC
From: Daniel Yoder
Topic: 26071 Message: 26074
Attachments: 5 described; binary payloads are missing from this source WARC

Thanks Bill,

I am just trying to sort out the differences in an oscillator circuit used for receiving and transmitting or even just calibrating.
Like the HRA-10-1
Does the grid leak circuit do the same in an Armstrong circuit for both receiving and transmitting circuits.
Thanks

26075. Re: [regenrx] Oscillator Circuits Receiver vs Transmitter [10 Attachments]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-06 16:45:47 UTC
From: William Wood
Topic: 26071 Message: 26075

These links are in no particular order
of importance or relativity to your pursuit
but thought they might be of some interest
Daniel… If you're like me you might let the
math throw you, but if you ignore half of it
you'll see how these oscillators work and
that's the important part (in my book) I do
have an older Sams booklet on these
with multi color flow charts that give you
an even better idea of what is going on in
those circuits. Lots of fun.
73 fer now
Bill KE9XQ
PS guess the receiver and transmitter
circuit's oscillators are doing the same
thing just different goals after those circuits…

https://en.wikipedia.org/wiki/Armstrong_oscillator

https://en.wikipedia.org/wiki/Pierce_oscillator

https://en.wikipedia.org/wiki/Electronic_oscillator

http://electronics.howstuffworks.com/oscillator2.htm

http://www.allaboutcircuits.com/worksheets/oscillator-circuits/

http://physics.oregonstate.edu/~giebultt/COURSES/ph412/Reading/oscillators-1p.pdf

http://www.dummies.com/how-to/content/electronics-components-oscillator-circuits.html

On Apr 6, 2016, at 10:44 AM, Daniel Yoder danyoder.cs@gmail.com [regenrx]
<regenrx@yahoogroups.com> wrote:

26076. oscillators again

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-06 17:37:58 UTC
From: William Wood
Topic: 26076 Message: 26076

Back again with a question
I used to know at least three or
four different oscillator circuits by
how a particular circuit was divided.
Say Armstrong had a divided Coil
Pierce divided Capacitors
Hartley again divided inductor.
Culpits ….. ???
Another … ???
And another ???
what were the other ones can someone
remind me I think I forgot, and don't
see my little booklet :)
If memory serves me correctly it was a
very easy to learn trick to make it easy
to tell the difference in half a dozen circuits.
At least the three or four main ones…
Thanks Everyone
73 fer now
Bill KE9XQ

two more links:

http://www.learnabout-electronics.org/Oscillators/osc10.php

http://www.electronics-tutorials.ws/oscillator/hartley.html

26077. Re: [regenrx] Oscillator Circuits Receiver vs Transmitter

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-06 19:13:45 UTC
From: Dan Yoder
Topic: 26071 Message: 26077

Hi bill I will look at them tonight does that SAMs book have an is not number or a title

Sent from my iPhone

> On Apr 6, 2016, at 12:45 PM, William Wood ke9xq@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
> These links are in no particular order
> of importance or relativity to your pursuit
> but thought they might be of some interest
> Daniel… If you're like me you might let the
> math throw you, but if you ignore half of it
> you'll see how these oscillators work and
> that's the important part (in my book) I do
> have an older Sams booklet on these
> with multi color flow charts that give you
> an even better idea of what is going on in
> those circuits. Lots of fun.
> 73 fer now
> Bill KE9XQ
> PS guess the receiver and transmitter
> circuit's oscillators are doing the same
> thing just different goals after those circuits…
>
> https://en.wikipedia.org/wiki/Armstrong_oscillator
>
> https://en.wikipedia.org/wiki/Pierce_oscillator
>
> https://en.wikipedia.org/wiki/Electronic_oscillator
>
> http://electronics.howstuffworks.com/oscillator2.htm
>
> http://www.allaboutcircuits.com/worksheets/oscillator-circuits/
>
> http://physics.oregonstate.edu/~giebultt/COURSES/ph412/Reading/oscillators-1p.pdf
>
> http://www.dummies.com/how-to/content/electronics-components-oscillator-circuits.html
>
>
>
> On Apr 6, 2016, at 10:44 AM, Daniel Yoder danyoder.cs@... [regenrx] <regenrx@yahoogroups.com> wrote:
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> "In the interest of Regenerating radio's lost art of Regeneration"
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> Yahoo Groups Links
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26078. Re: [regenrx] Hmmm, now what do I do with that "DBT" I built???

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-08 02:39:08 UTC
From: Phil
Topic: 26067 Message: 26078

Hi Mark,
Sorry about the delay in answering this. Here is the case I used for my
DBT. . .
Porcelain lamp socket in the lid, duplex box for a "light" switch and
outlet in the right rear corner. Room for a few bulbs.
http://www.harborfreight.com/11-12-x-7-12-x-4-12-aluminum-case-69316.html

73 From "The Beaconeer's Lair"
Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)

PRESENT HF/LF RADIOS:
Grundigs: S-350 (~2006), G6 (2011) & S450DLX (2014).
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Icom: IC-735 Transceiver (~1990).
Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
Icom: IC-7200 Transceiver (~2015).
R-Shack: DX-380 digital portable (~1990).
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ACCESSORIES: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
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ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
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Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

On 4/3/2016 10:38 PM, msalbert@... [regenrx] wrote:
>
> I'm always looking for boxes and homebrew ideas. Yours sounds
> cool, Got a link to the box you used, or maybe a picture?
> Regards,
>
> Mark KB9VKE
>
> -----Original Message-----
> From: Phil ko6bb1@... [regenrx] <regenrx@yahoogroups.com>
> To: Regen group <regenrx@yahoogroups.com>
> Sent: Sun, Apr 3, 2016 04:48 PM
> Subject: [regenrx] Hmmm, now what do I do with that "DBT" I built???
>
>
> Perhaps a year or so ago I built a very nice "DBT" (Dim Bulb Tester) in

> one of those classy little aluminum and fiber Cases that Harbor 'Fright'
> sells. Went the extra mile to make it nice, lamp socket in the lid,
> double duplex box with a power switch and outlet, 3 wire power cord and
> of course storage for a few light bulbs.
>
> With the new isolated variac it's not likely it'll get much use, but
> it's way too nice to "part out", cost too much to make it worth the cost
> of selling it/shipping it, etc.
>
> Guess I'll hang on to it either as a curiosity or for some "quick
> testing" of some questionable device.
>
> Perhaps if I run across a neophyte BA enthusiast in the local area I'll
> pass it on to him. . .

26079. Oscillator Book

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-09 20:31:20 UTC
From: William Wood
Topic: 26079 Message: 26079

I found that oscillator book we were talking
about a couple of days ago. It’s titled:
Oscillator Circuits and it is from the Sams
Photo Pack series ‘Basic Electronics Series'.
I paid a dollar or two at a swap fest so they
are around. Not sure it is worth $15 that is
being offered at ebay right now. It’s paperback
with 125 pages, my copy was in it’s 6th
printing and dated 1964.

If you only wanted a couple of pages I’d be
happy to xerox them for you and send VIA
an attachment. It does help you see what is
going on in those circuits. IF I ever run across
another copy or two el cheapo, I will glomb
onto them for folks interested.

I’ve included a link for an ebay copy of the
book and while I like the shipping cost, I think
he should come down a couple of bucks. :)
Only because I’m a cheap skate :)

73 fer now
Bill KE9XQ

http://www.ebay.com/itm/Oscillator-Circuits-Basic-Electronics-Series-1964-Photofact-Publication-Box-E-/231607547087?hash=item35ece2b4cf:g:U0EAAOSwMmBVkJfF

26080. Re: [regenrx] Oscillator Book

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-09 20:57:11 UTC
From: Daniel Yoder
Topic: 26079 Message: 26080

thanks bill i ofered him 10 for it

On Sat, Apr 9, 2016 at 4:31 PM, William Wood ke9xq@... [regenrx] <
regenrx@yahoogroups.com> wrote:

> I found that oscillator book we were talking
> about a couple of days ago. It’s titled:
> Oscillator Circuits and it is from the Sams
> Photo Pack series ‘Basic Electronics Series'.
> I paid a dollar or two at a swap fest so they
> are around. Not sure it is worth $15 that is
> being offered at ebay right now. It’s paperback
> with 125 pages, my copy was in it’s 6th
> printing and dated 1964.
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> If you only wanted a couple of pages I’d be
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> onto them for folks interested.
>
> I’ve included a link for an ebay copy of the
> book and while I like the shipping cost, I think
> he should come down a couple of bucks. :)
> Only because I’m a cheap skate :)
>
> 73 fer now
> Bill KE9XQ
>
>
>
>
> http://www.ebay.com/itm/Oscillator-Circuits-Basic-Electronics-Series-1964-Photofact-Publ
ication-Box-E-/231607547087?hash=item35ece2b4cf:g:U0EAAOSwMmBVkJfF
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> "In the interest of Regenerating radio's lost art of Regeneration"
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> Yahoo Groups Links
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26081. Re: [regenrx] Oscillator Book

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-09 21:03:14 UTC
From: William Wood
Topic: 26079 Message: 26081

Hey Daniel
I see it’s sold already
did you get it then???
If not, I’ll look into copying a few
pages and sending them your way.
Hope you did
Bill

On Apr 9, 2016, at 3:57 PM, Daniel Yoder danyoder.cs@... [regenrx]
<regenrx@yahoogroups.com> wrote:

>
> thanks bill i ofered him 10 for it
>
> On Sat, Apr 9, 2016 at 4:31 PM, William Wood ke9xq@... [regenrx]
<regenrx@yahoogroups.com>wrote:
> I found that oscillator book we were talking
> about a couple of days ago. It’s titled:
> Oscillator Circuits and it is from the Sams
> Photo Pack series ‘Basic Electronics Series'.
> I paid a dollar or two at a swap fest so they
> are around. Not sure it is worth $15 that is
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> with 125 pages, my copy was in it’s 6th
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> going on in those circuits. IF I ever run across
> another copy or two el cheapo, I will glomb
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> book and while I like the shipping cost, I think
> he should come down a couple of bucks. :)
> Only because I’m a cheap skate :)
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> 73 fer now
> Bill KE9XQ
>
>
>
> http://www.ebay.com/itm/Oscillator-Circuits-Basic-Electronics-Series-1964-Photofact-Publ
ication-Box-E-/231607547087?hash=item35ece2b4cf:g:U0EAAOSwMmBVkJfF

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> "In the interest of Regenerating radio's lost art of Regeneration"
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> Yahoo Groups Links
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26082. Re: [regenrx] Oscillator Book

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-09 21:08:25 UTC
From: Rob
Topic: 26079 Message: 26082

really?
I wonder who gets it?
I did BUY IT NOW for $15

On 04/09/2016 04:57 PM, Daniel Yoder danyoder.cs@... [regenrx] wrote:
> thanks bill i ofered him 10 for it
>
> On Sat, Apr 9, 2016 at 4:31 PM, William Wood ke9xq@...
> <mailto:ke9xq@...> [regenrx] <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>> wrote:
>
> I found that oscillator book we were talking
> about a couple of days ago. It’s titled:
> Oscillator Circuits and it is from the Sams
> Photo Pack series ‘Basic Electronics Series'.
> I paid a dollar or two at a swap fest so they
> are around. Not sure it is worth $15 that is
> being offered at ebay right now. It’s paperback
> with 125 pages, my copy was in it’s 6th
> printing and dated 1964.
>
> If you only wanted a couple of pages I’d be
> happy to xerox them for you and send VIA
> an attachment. It does help you see what is
> going on in those circuits. IF I ever run across
> another copy or two el cheapo, I will glomb
> onto them for folks interested.
>
> I’ve included a link for an ebay copy of the
> book and while I like the shipping cost, I think
> he should come down a couple of bucks. :)
> Only because I’m a cheap skate :)
>
> 73 fer now
> Bill KE9XQ
>
>
>
> http://www.ebay.com/itm/Oscillator-Circuits-Basic-Electronics-Series-1964-Photofact-Publ
ication-Box-E-/231607547087?hash=item35ece2b4cf:g:U0EAAOSwMmBVkJfF
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> "In the interest of Regenerating radio's lost art of Regeneration"
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> Yahoo Groups Links
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> <mailto:regenrx-fullfeatured@yahoogroups.com>
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26083. Re: [regenrx] Oscillator Book

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-09 21:12:00 UTC
From: Rob
Topic: 26079 Message: 26083

So what ARE the copyright rules for a book like this... printed 52 years
ago?
Is this protected or can we scan and share circuits from this book?

On 04/09/2016 05:08 PM, Rob roomberg@... [regenrx] wrote:
>
> really?
> I wonder who gets it?
> I did BUY IT NOW for $15
>
> On 04/09/2016 04:57 PM, Daniel Yoder danyoder.cs@... [regenrx]
> wrote:
>> thanks bill i ofered him 10 for it
>>
>> On Sat, Apr 9, 2016 at 4:31 PM, William Wood ke9xq@...
>> <mailto:ke9xq@...> [regenrx] <regenrx@yahoogroups.com
>> <mailto:regenrx@yahoogroups.com>> wrote:
>>
>> I found that oscillator book we were talking
>> about a couple of days ago. It’s titled:
>> Oscillator Circuits and it is from the Sams
>> Photo Pack series ‘Basic Electronics Series'.
>> I paid a dollar or two at a swap fest so they
>> are around. Not sure it is worth $15 that is
>> being offered at ebay right now. It’s paperback
>> with 125 pages, my copy was in it’s 6th
>> printing and dated 1964.
>>
>> If you only wanted a couple of pages I’d be
>> happy to xerox them for you and send VIA
>> an attachment. It does help you see what is
>> going on in those circuits. IF I ever run across
>> another copy or two el cheapo, I will glomb
>> onto them for folks interested.
>>
>> I’ve included a link for an ebay copy of the
>> book and while I like the shipping cost, I think
>> he should come down a couple of bucks. :)
>> Only because I’m a cheap skate :)
>>
>> 73 fer now
>> Bill KE9XQ
>>
>>
>>

>> http://www.ebay.com/itm/Oscillator-Circuits-Basic-Electronics-Series-1964-Photofact-Publication-Box-E-/231607547087?hash=item35ece2b4cf:g:U0EAAOSwMmBVkJfF
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>> <mailto:regenrx-fullfeatured@yahoogroups.com>
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26084. Re: [regenrx] Oscillator Book

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-09 21:14:01 UTC
From: William Wood
Topic: 26079 Message: 26084

Sounds Good Rob
you can help share the info :)
I'll do some zeroxing for Daniel :)
And keep my eye pealed for other
copies.
73 fer now
Bill KE9XQ

On Apr 9, 2016, at 4:08 PM, Rob roomberg@... [regenrx] <regenrx@yahoogroups.com> wrote:

> really?
> I wonder who gets it?
> I did BUY IT NOW for $15
>
>
> On 04/09/2016 04:57 PM, Daniel Yoder danyoder.cs@... [regenrx] wrote:
>>
>> thanks bill i ofered him 10 for it
>>
>> On Sat, Apr 9, 2016 at 4:31 PM, William Wood ke9xq@... [regenrx]
<regenrx@yahoogroups.com>wrote:
>> I found that oscillator book we were talking
>> about a couple of days ago. It's titled:
>> Oscillator Circuits and it is from the Sams
>> Photo Pack series 'Basic Electronics Series'.
>> I paid a dollar or two at a swap fest so they
>> are around. Not sure it is worth $15 that is
>> being offered at ebay right now. It's paperback
>> with 125 pages, my copy was in it's 6th
>> printing and dated 1964.
>>
>> If you only wanted a couple of pages I'd be
>> happy to xerox them for you and send VIA
>> an attachment. It does help you see what is
>> going on in those circuits. IF I ever run across
>> another copy or two el cheapo, I will glomb
>> onto them for folks interested.
>>
>> I've included a link for an ebay copy of the
>> book and while I like the shipping cost, I think
>> he should come down a couple of bucks. :)
>> Only because I'm a cheap skate :)
>>
>> 73 fer now
>> Bill KE9XQ

>>
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>>
>> http://www.ebay.com/itm/Oscillator-Circuits-Basic-Electronics-Series-1964-Photofact-Publication-Box-E-/231607547087?hash=item35ece2b4cf:g:U0EAAOSwMmBVkJfF
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26085. Re: [regenrx] Oscillator Book

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-09 21:30:27 UTC
From: William Wood
Topic: 26079 Message: 26085

I'm not sure of the copy right rules
I do know this is no longer being published
and if you are not copying the whole book,
only small sections, and for educational
purposes and such, they will not worry. I
got permissions from other publishers to
copy, as long as I did not sell, or claim I
wrote it.

We'll let the folks that know chime in, but
I'm not making a dime, nor am I claiming
I wrote it so I think we are good in that
department.

Sams I think sold and gave away most
of their material years ago, and I gave away
two 4 drawer filling cabnets full of those photo
fact envelopes. And they are all available on
disks now I believe.

Let us know what you guys think
73 fer now
Bill KE9XQ

On Apr 9, 2016, at 4:14 PM, William Wood ke9xq@... [regenrx] <regenrx@yahoogroups.com>
wrote:

> Sounds Good Rob
>
> you can help share the info :)
> I'll do some zeroxing for Daniel :)
> And keep my eye pealed for other
> copies.
> 73 fer now
> Bill KE9XQ
>
>
>
> On Apr 9, 2016, at 4:08 PM, Rob roomberg@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
>> really?
>> I wonder who gets it?
>> I did BUY IT NOW for $15
>>
>>
>> On 04/09/2016 04:57 PM, Daniel Yoder danyoder.cs@... [regenrx] wrote:

>>>
>>> thanks bill i ofered him 10 for it
>>>
>>> On Sat, Apr 9, 2016 at 4:31 PM, William Wood ke9xq@charter.net [regenrx]
<regenrx@yahoogroups.com>wrote:
>>> I found that oscillator book we were talking
>>> about a couple of days ago. It’s titled:
>>> Oscillator Circuits and it is from the Sams
>>> Photo Pack series ‘Basic Electronics Series'.
>>> I paid a dollar or two at a swap fest so they
>>> are around. Not sure it is worth $15 that is
>>> being offered at ebay right now. It’s paperback
>>> with 125 pages, my copy was in it’s 6th
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>>>
>>> If you only wanted a couple of pages I’d be
>>> happy to xerox them for you and send VIA
>>> an attachment. It does help you see what is
>>> going on in those circuits. IF I ever run across
>>> another copy or two el cheapo, I will glomb
>>> onto them for folks interested.
>>>
>>> I’ve included a link for an ebay copy of the
>>> book and while I like the shipping cost, I think
>>> he should come down a couple of bucks. :)
>>> Only because I’m a cheap skate :)
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>>> 73 fer now
>>> Bill KE9XQ
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>>> http://www.ebay.com/itm/Oscillator-Circuits-Basic-Electronics-Series-1964-Photofact-Pu
blication-Box-E-/231607547087?hash=item35ece2b4cf:g:U0EAAOSwMmBVkJfF
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26086. a few on line Oscillator goodies

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-09 23:23:48 UTC
From: William Wood
Topic: 26086 Message: 26086

http://www.northcountryradio.com/PDFs/070302007.pdf

http://physics.oregonstate.edu/~giebultt/COURSES/ph412/Reading/oscillators-1p.pdf

https://en.wikipedia.org/wiki/Electronic_oscillator

http://www.ibiblio.org/kuphaldt/socratic/output/oscill.pdf

http://www.qsl.net/hiarc/files/Oscillators-TheoryAndPractice_EMesser_2009-10.pdf

http://www.eetkorea.com/ARTICLES/2001SEP/2001SEP06_AMD_AN.PDF

http://www.ecsxtal.com/store/pdf/oscir_des.pdf

http://www.learnabout-electronics.org/Downloads/Oscillators-module-02.pdf

https://content.grantham.edu/at/EE332/Week_6_Op_Oscillator_Circuits.pdf

http://www.ece.ucsb.edu/Faculty/rodwell/Classes/ece218b/notes/Oscillators1.pdf

http://www.frequencymanagement.com/web_pdfs/cat_pdfs_applicationNotes/45-49.PDF

26087. Re: [regenrx] Oscillator Circuits Receiver vs Transmitter

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-10 05:02:20 UTC
From: david.newkirk@...
Topic: 26071 Message: 26087

Bill wrote:

> All oscillators have positive feedback.

Not so. Some oscillators work by generating negative resistance by means other than positive feedback. (When a tuned circuit is connected to a negative resistance of a high enough absolute value to overcome losses in the tuned circuit, the result is oscillation.) The dynatron is such an oscillator; so is the transitron. Wikipedia has good coverage of both.

A transitron oscillator is straightforward to build at shortwave frequencies with any RF pentode that has a separate suppressor-grid connection. I've done so and then attempted to use it for detection in the manner of positive-feedback regenerative detector. But the snag with oscillators that don't operate by means of positive feedback is that their output is low, as they don't exhibit the high gain we take for granted with positive feedback (regenerative) circuits. So my experimental transitron detector was barely able to detect anything, even a very strong test signal on the bench.

Best regards,

Dave
amateur radio W9BRD

26088. RE: [regenrx] Oscillator Circuits Receiver vs Transmitter

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-10 11:14:28 UTC
From: Mike Feher
Topic: 26071 Message: 26088

I recall in the early 60’s building both a regen receiver and transmitter using tunnel diodes. 73 – Mike

Mike B. Feher, N4FS

89 Arnold Blvd.

Howell, NJ, 07731

732-886-5960

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Sunday, April 10, 2016 1:02 AM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Oscillator Circuits Receiver vs Transmitter

Bill wrote:

> All oscillators have positive feedback.

Not so. Some oscillators work by generating negative resistance by means other than positive feedback. (When a tuned circuit is connected to a negative resistance of a high enough absolute value to overcome losses in the tuned circuit, the result is oscillation.) The dynatron is such an oscillator; so is the transitron. Wikipedia has good coverage of both.

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Best regards,

Dave

amateur radio W9BRD

26089. Regarding the ceramic resonator radio (VK3YE)

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-10 12:39:26 UTC
From: rlpend@...
Topic: 26089 Message: 26089

Hi,

I built a prototype using resonators from Rob (Thanks again) and it works well at night when there is propagation. However the tuning range is 7014 to 7094. I would like this to be either wider or higher in frequency. Does anyone know a solution other than changing the variable capacitor (Mine is 16-116 pF).

I did not ground the resonator.

Fortney N5JYW

26090. Re: [regenrx] Oscillator Circuits Receiver vs Transmitter

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-10 12:41:39 UTC
From: Bill Cromwell
Topic: 26071 Message: 26090

Hi Dave,

While you are on this subject could you explain to some us why negative resistance in not just a left-handed way of saying positive feedback and positive resistance not left-handed negative feedback? Enquiring minds want to know.

73,

Bill KU8H

On 04/10/2016 01:02 AM, david.newkirk@... [regenrx] wrote:
>
> Bill wrote:
>
>
> > All oscillators have positive feedback.
>
> Not so. Some oscillators work by generating negative resistance by
> means other than positive feedback. (When a tuned circuit is connected
> to a negative resistance of a high enough absolute value to overcome
> losses in the tuned circuit, the result is oscillation.) The dynatron
> is such an oscillator; so is the transitron. Wikipedia has good
> coverage of both.
>
> A transitron oscillator is straightforward to build at shortwave
> frequencies with any RF pentode that has a separate suppressor-grid
> connection. I've done so and then attempted to use it for detection in
> the manner of positive-feedback regenerative detector. But the snag
> with oscillators that don't operate by means of positive feedback is
> that their output is low, as they don't exhibit the high gain we take
> for granted with positive feedback (regenerative) circuits. So my
> experimental transitron detector was barely able to detect anything,
> even a very strong test signal on the bench.
>
> Best regards,
>
> Dave
> amateur radio W9BRD
>

26091. two different copies of the same book

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-10 13:05:13 UTC
From: William Wood
Topic: 26091 Message: 26091

Dan, check you inbox or spam folder for a post from me :)
Everyone on board here, I just found
two more copies of that book…

if not the same, a very similar
to the one we were just talking about
is up for sale on the watery place…
the gent has two copies and they
are $15 each. IF you are interested and
don't want zeroxed pages here's another
chance to get a copy, they must be fairly
well available if we wait long enough.
Cheers
Bill KE9XQ

http://www.ebay.com/itm/Sams-OSCILLATOR-CIRCUITS-Thomas-M-Adams-1971-/201553350116?hash=item2eed840de4:g:B68AAOSwbwlW~swH

26092. Re: [regenrx] two different copies of the same book

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-10 14:33:52 UTC
From: Adrian Flynn
Topic: 26091 Message: 26092

I checked my favorite watering hole for books "ABESBOOKS.COM" and they
wanted about $65 if I had the right book ! ☐
73
Adrian KF7DYU
Adrian, MI.
On Apr 10, 2016 9:15 AM, "William Wood ke9xq@... [regenrx]" <
regenrx@yahoogroups.com> wrote:

> Dan, check you inbox or spam folder for a post from me :)
> Everyone on board here, I just found
> two more copies of that book…
>
> if not the same, a very similar
> to the one we were just talking about
> is up for sale on the watery place…
> the gent has two copies and they
> are $15 each. IF you are interested and
> don’t want zeroxed pages here’s another
> chance to get a copy, they must be fairly
> well available if we wait long enough.
> Cheers
> Bill KE9XQ
>
>
> http://www.ebay.com/itm/Sams-OSCILLATOR-CIRCUITS-Thomas-M-Adams-1971-/201553350116?hash=
item2eed840de4:g:B68AAOSwbwlW~swH
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26093. Re: [regenrx] Oscillator Circuits Receiver vs Transmitter

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-10 15:43:52 UTC
From: david.newkirk@...
Topic: 26071 Message: 26093

Bill wrote:

> While you are on this subject could you explain to some us why
> negative resistance in not just a left-handed way of saying positive feedback
> and positive resistance not left-handed negative feedback?

Resistance is a property of materials, and negative resistance--actually negative _differential_ resistance--is a property of some materials and some systems under particular conditions. Positive feedback happens to be a particular means--a special case--of obtaining negative resistance. All electronic oscillators oscillate by means of means of negative resistance, but positive feedback is only one among multiple means of producing the negative resistance necessary for electronic oscillation.

Wikipedia's coverage of negative resistance is very good, and I highly recommend it as a read for regenerative-receiver folk. (Negative resistance - Wikipedia, the free encyclopedia https://en.wikipedia.org/wiki/Negative_resistance

https://en.wikipedia.org/wiki/Negative_resistance

Negative resistance - Wikipedia, the free encycl...
https://en.wikipedia.org/wiki/Negative_resistance In electronics, negative resistance (NR) is a property of some electrical circuits and devices in which an increase in voltage across the device's terminals res...

View on en.wikipedia.org https://en.wikipedia.org/wiki/Negative_resistance
Preview by Yahoo

) Just ignore the math--I do--and concentrate on the narrative text. As the coverage proceeds you will encounter our beloved regenerative detector, as well as the Poulsen arc transmitter, the dynatron, Gunn and tunnel diodes, and more. All of these involve negative resistance, but only the regenerative detector (among the negative resistance generators I just mentioned) involves positive feedback.

We can also build oscillators--at least at audio and lower frequencies--with gas-discharge tubes like neon bulbs and voltage regulator (VR) tubes. These devices also exhibit negative resistance, and their negative-resistance characteristics also _do not_ come from positive feedback.

We regenerative receiver enthusiasts are direct benefactors of negative resistance obtained by means of positive feedback. The tuned circuit in a regenerative detector's positive feedback loop ensures that sufficient negative resistance (and gain) for oscillation occur only at one frequency. But a regenerative-detector flaw that especially users of triodes (vacuum tubes, JFETs, BJTs) may encounter, however, is _fringe howl_--a tendency of a regenerative detector to oscillate _at audio_ in the region at and just above the feedback level at which RF oscillation starts--at and just above _critical regeneration_. Fringe howl happens when an RF oscillator that uses positive feedback to generate its negative resistance oscillator seeks, but keeps not achieving, amplitude

stability at an AF or VLF/LF rate. When this is happening, the feedback loop produces _specific_ negative resistance at the tuned-circuit resonance, and _the entire oscillator/detector circuit as a one-port black box_ exhibits _generic_ negative resistance capable of leveraging RC time constants and/or LC resonances associated with the circuit's active device for oscillation at AF or VLF/LF. A self-quenching superregenerative detector--a type of _blocking oscillator_--leverages this effect on purpose. A superregen cannot oscillate at VLF/LF if it is not also oscillating at RF. _Squegging_ is a time-honored term for unwanted VLF/LF oscillation in an oscillator otherwise intended to oscillate only at RF.

Recently a RadioBoard contributor showed how using separate, adjustable negative bias on the gate of a JFET regenerative detector can serve to entirely suppress fringe howl. This is a technique I must try, as high tendency for fringe howl in JFET and BJT oscillators is a chief reason why I haven't much played with simple solid-state regenerative detectors. See how some of those classic JFET regen circuits have COARSE and FINE regeneratiion controls? Incorrigible fringe howl is the reason why.

Best regards,

Dave
amateur radio W9BRD
radio pages: David Newkirk Writings: Enjoying Radio http://dpnwritings.nfshost.com/ej/

http://dpnwritings.nfshost.com/ej/

David Newkirk Writings: Enjoying Radio http://dpnwritings.nfshost.com/ej/ What's New at Enjoying Radio Amateur Radio W9BRD Then and Now The First W9VES Amateur Radio W9VES I (1935–1969) and W9VES II (1996–2014) The...

View on dpnwritings.nfshost.com http://dpnwritings.nfshost.com/ej/
Preview by Yahoo

26094. That good old-time AC-DC project

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-10 23:04:25 UTC
From: Hubert Miller
Topic: 26094 Message: 26094

Was just looking at a radio projects book, "Radio for the Millions", 1943, given to me free, at yesterday's NWVRS antique radio swapmeet.

I had looked at those projects before, but somehow it never struck me this strongly: all those AC-DC projects, with metal chassis and front

panel, directly wired to the AC input, not thru some isolating capacitor, as in home AC-DC radios, which would limit the shock current.

So when you plug the project radio in, you have a 50% chance that the front panel is directly connected to 120 AC. In vain did i look for

any word of caution about this in the book. Okay for us who have some experience, but the book talks about the complete beginner

buying parts from a list and assembling per the diagram.

I spent a lot of fun time as a youngster playing with unreasonably high voltages, but i think all those experiments were with high enough

voltage that it would throw you clear. A bare metal front panel and headphones both running right to the AC mains scares me.

I gave away maybe 30 lbs. of radio magazines at the same swapmeet, and came back with an SW-3 with 7 sets of plug-in coils i bought.

-Hue Miller

26095. Re: [regenrx] That good old-time AC-DC project

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-10 23:19:53 UTC
From: Leonard Meek
Topic: 26094 Message: 26095

Hue, I think the 1943 radio builder didn't have to work on wet concrete floors like we do today. Also, there were two types of radio builders. There were those of us who knew not to grab a wire without checking for voltage first. The others are no longer with us.

BTW, Radio for the Millions was my bible for many years. I still have my original copy.

Leonard

----- Original Message -----
From: Hubert Miller kargo_cult@... [regenrx]
To: tetrode@... ; regenrx@yahoogroups.com
Sent: Sunday, April 10, 2016 1:04 PM
Subject: [regenrx] That good old-time AC-DC project

Was just looking at a radio projects book, "Radio for the Millions", 1943, given to me free, at yesterday's NWVRS antique radio swapmeet.

I had looked at those projects before, but somehow it never struck me this strongly: all those AC-DC projects, with metal chassis and front

panel, directly wired to the AC input, not thru some isolating capacitor, as in home AC-DC radios, which would limit the shock current.

So when you plug the project radio in, you have a 50% chance that the front panel is directly connected to 120 AC. In vain did i look for

any word of caution about this in the book. Okay for us who have some experience, but the book talks about the complete beginner

buying parts from a list and assembling per the diagram.

I spent a lot of fun time as a youngster playing with unreasonably high voltages, but i think all those experiments were with high enough

voltage that it would throw you clear. A bare metal front panel and headphones both running right to the AC mains scares me.

I gave away maybe 30 lbs. of radio magazines at the same swapmeet, and came back with an SW-3 with 7 sets of plug-in coils i bought.

-Hue Miller

26096. Re: [regenrx] Oscillator Circuits Receiver vs Transmitter

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-10 23:21:29 UTC
From: Bill Cromwell
Topic: 26071 Message: 26096

Thank you Dave,

I was told/taught wrong by a teacher years ago. My view has served well
for a long time (around about 1960) but now it's time to adjust the view.

73,

Bill KU8H

On 04/10/2016 11:43 AM, david.newkirk@... [regenrx] wrote:
>
> Bill wrote:
>
>
> > While you are on this subject could you explain to some us why
> > negative resistance in not just a left-handed way of saying positive feedback
> > andpositive resistance not left-handed negative feedback?
>
> Resistance is a property of materials, and negative
> resistance--actually negative _differential_ resistance--is a property
> of some materials and some systems under particular conditions.
> Positive feedback happens to be a particular means--a special case--of
> obtaining negative resistance. All electronic oscillators oscillate by
> means of means of negative resistance, but positive feedback is only
> one among multiple means of producing the negative resistance
> necessary for electronic oscillation.
>

26097. Re: [regenrx] That good old-time AC-DC project

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-10 23:36:27 UTC
From: Bill Cromwell
Topic: 26094 Message: 26097

Hi Leonard,

My father taught me all the safety lessons and those have been refreshed numerous times over the years. I was allowed to have the AC mains and high voltage power supplies to run tubes in my early teens - unsupervised. I'm afraid a younger generation doesn't have that kind of advantage. Probably very few of them will ever need to know any of that anyway.

If my concrete floor was wet I fixed that before I messed around with a hobby. Priorities ya know.

73,

Bill KU8H

On 04/10/2016 07:19 PM, 'Leonard Meek' lemeek@... [regenrx] wrote:
>
> Hue, I think the 1943 radio builder didn't have to work on wet
> concrete floors like we do today. Also, there were two types of radio
> builders. There were those of us who knew not to grab a wire without
> checking for voltage first. The others are no longer with us.
> BTW, Radio for the Millions was my bible for many years. I still have
> my original copy.
> Leonard
>

26098. Re: [regenrx] two different copies of the same book ABE $142

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-11 00:11:00 UTC
From: Rob
Topic: 26091 Message: 26098

Its the right book.
The one I got for $16.... is priced now at $142.60 USD
Thats just nuts.
http://www.abebooks.com Sams OSCILLATOR CIRCUITS Thomas M Adams 1964
edition.

On 04/10/2016 10:33 AM, Adrian Flynn ADRIANJAMESFLYNN@...
[regenrx] wrote:
>
> I checked my favorite watering hole for books "ABESBOOKS.COM
> <http://ABESBOOKS.COM>" and they wanted about $65 if I had the right
> book ! ☐
> 73
> Adrian KF7DYU
> Adrian, MI.
>
> On Apr 10, 2016 9:15 AM, "William Wood ke9xq@...
> <mailto:ke9xq@...> [regenrx]" <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>> wrote:
>
> Dan, check you inbox or spam folder for a post from me :)
> Everyone on board here, I just found
> two more copies of that book…
>
> if not the same, a very similar
> to the one we were just talking about
> is up for sale on the watery place…
> the gent has two copies and they
> are $15 each. IF you are interested and
> don't want zeroxed pages here's another
> chance to get a copy, they must be fairly
> well available if we wait long enough.
> Cheers
> Bill KE9XQ
>
> http://www.ebay.com/itm/Sams-OSCILLATOR-CIRCUITS-Thomas-M-Adams-1971-/201553350116?hash=item2eed840de4:g:B68AAOSwbwlW~swH
> <http://www.ebay.com/itm/Sams-OSCILLATOR-CIRCUITS-Thomas-M-Adams-1971-/201553350116?hash=item2eed840de4:g:B68AAOSwbwlW%7EswH>
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> "In the interest of Regenerating radio's lost art of Regeneration"
> ---
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> Yahoo Groups Links
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>
> <mailto:regenrx-fullfeatured@yahoogroups.com>
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>

26099. Re: [regenrx] two different copies of the same book ABE $142

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-11 00:57:55 UTC
From: William Wood
Topic: 26091 Message: 26099

There are a couple at ebay for an exorbitant
amount too :) Don’t know why, but some folks
think if a book is out of print, all of a sudden
the pages are golden edged…
Theres a book on limited space antennas out
there too, that has been out of print for a few
years, and you can get it for over a hundred
dollars, or wait for the next swap meet and
pick it out of a misc box for a dollar or two.
fun subject…
73 fer now
Bill KE9XQ

On Apr 10, 2016, at 7:11 PM, Rob roomberg@... [regenrx] <regenrx@yahoogroups.com> wrote:

> Its the right book.
> The one I got for $16.... is priced now at $142.60 USD
> Thats just nuts.
> http://www.abebooks.com Sams OSCILLATOR CIRCUITS Thomas M Adams 1964 edition.
>
>
>

26100. Re: [regenrx] That good old-time AC-DC project

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-11 01:47:50 UTC
From: msalbert@...
Topic: 26094 Message: 26100

Is it a design requirement that the chassis has to be connected to the power line? I have a Knight Kit AA5 radio from the 70s that used an isolated common bus wiring scheme, to which one side of the AC line was connected so The chassis was not directly connected to the AC line. Instead, it has a .05 uF capacitor from the chassis to the isolated common bus so the variable capacitor frame was at RF ground. As far as I can tell, it has no chassis shock hazard. And of course, it is in a plastic cabinet. I'm sure most of you regular fellows know all the problems and modern solutions for those 1943 designs. IMHO they could be built as long as you similarly modified the design like the Knight kit to avoid the direct chassis connection situation, Used a polarized plug, and an isolation transformer for testing then put it in an insulated box. An inexperienced Builder might not be able to make similar changes on his own, though. Or, best of all just use an isolation transformer for the power supply. Regards Mark. KB9VKE. -----Original Message----- From: 'Leonard Meek' lemeek@... [regenrx] To: regenrx Sent: Sun, Apr 10, 2016 06:20 PM Subject: Re: [regenrx] That good old-time AC-DC project

Hue, I think the 1943 radio builder didn't have to work on wet concrete floors like we do today. Also, there were two types of radio builders. There were those of us who knew not to grab a wire without checking for voltage first. The others are no longer with us. BTW, Radio for the Millions was my bible for many years. I still have my original copy. Leonard

----- Original Message -----

From: Hubert Miller kargo_cult@... [regenrx]

To: tetrode@googlegroups.com ; regenrx@yahoogroups.com

Sent: Sunday, April 10, 2016 1:04 PM

Subject: [regenrx] That good old-time AC-DC project

Was just looking at a radio projects book, ☐Radio for the Millions☐, 1943, given to me free, at yesterday☐s NWVRS antique radio swapmeet.

I had looked at those projects before, but somehow it never struck me this strongly: all those AC-DC projects, with metal chassis and front

panel, directly wired to the AC input, not thru some isolating capacitor, as in home AC-DC radios, which would limit the shock current.

So when you plug the project radio in, you have a 50% chance that the front panel is directly connected to 120 AC. In vain did i look for

any word of caution about this in the book. Okay for us who have some experience, but the book talks about the complete beginner

buying parts from a list and assembling per the diagram.

I spent a lot of fun time as a youngster playing with unreasonably high voltages, but i think all those experiments were with high enough

voltage that it would throw you clear. A bare metal front panel and headphones both running right to the AC mains scares me.

I gave away maybe 30 lbs. of radio magazines at the same swapmeet, and came back with an SW-3 with 7 sets of plug-in coils i bought.

-Hue Miller

26101. Re: [regenrx] That good old-time AC-DC project

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-11 02:34:26 UTC
From: Bill Cromwell
Topic: 26094 Message: 26101

Hi Mark,

That cap from the chassis to the floating ground is subject leakage or a dead short. If it is the original you shouldn't trust it with your life. As you mentioned, the case is plastic and ther knobs probably are too. So there is no exposed metal part.

These radios are called AC/DC because they will run from the 120 volt AC line *_OR_* from 120 volts DC. So such a radio could be operated from a battery supply - perhaps with a multivibrator type of "inverter" to give 120 volts DC output from 12 volts DC input.

I have been running 6-tube receivers from batteries and I find it is very practical. I use a series stack of 9-volt batteries for B+ and those last several weeks in moderate use. They won't run the heater string though. For that you might get along well with one those newfangled DC-DC converters that can supply 120 volts DC from a 12 volt SLAB to the heater string in the AA5 and the series stack for B+. 90 volts (or even 45) volts of B+ may surprise you how well it will work.

73,

Bill KU8H

On 04/10/2016 09:47 PM, msalbert@... [regenrx] wrote:
>
> Is it a design requirement that the chassis has to be connected to the
> power line? I have a Knight Kit AA5 radio from the 70s that used an
> isolated common bus wiring scheme, to which one side of the AC line
> was connected so The chassis was not directly connected to the AC
> line. Instead, it has a .05 uF capacitor from the chassis to the
> isolated common bus so the variable capacitor frame was at RF ground.
> As far as I can tell, it has no chassis shock hazard. And of course,
> it is in a plastic cabinet.
> I'm sure most of you regular fellows know all the problems and modern
> solutions for those 1943 designs. IMHO they could be built as long as
> you similarly modified the design like the Knight kit to avoid the
> direct chassis connection situation, Used a polarized plug, and an
> isolation transformer for testing then put it in an insulated box. An
> inexperienced Builder might not be able to make similar changes on his
> own, though. Or, best of all just use an isolation transformer for the
> power supply.
>
> Regards
> Mark. KB9VKE.

26102. AC-DC project Radio for the Millions is available as PDF

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-11 06:23:51 UTC
From: Rob
Topic: 26094 Message: 26102

Radio for the Millions is available as a 60MB PDF download.

26103. Re: [regenrx] AC-DC project Radio for the Millions is available as PDF

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-12 03:27:41 UTC
From: Alvin Schmitt
Topic: 26094 Message: 26103

what is the URL? Alvin P. Schmitt

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P.O. Box 201Newport VA 24128-0201

1-888-730-6478
http://www.apsministries.org/

On Monday, April 11, 2016 2:23 AM, "Rob roomberg@... [regenrx]" <regenrx@yahoogroups.com> wrote:

> Radio for the Millions is available as a 60MB PDF download.

26104. Re: [regenrx] AC-DC project Radio for the Millions is available as PDF

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-12 03:40:58 UTC
From: Robert S Jenkins
Topic: 26094 Message: 26104

https://archive.org/details/RadioForTheMillions
<https://archive.org/details/RadioForTheMillions>

Robert
KG4KGL

> On Apr 11, 2016, at 11:27 PM, Alvin Schmitt schmitt_alvin@... [regenrx]
<regenrx@yahoogroups.com> wrote:
>
>
> what is the URL?
>
> Alvin P. Schmitt
>
> APSTRON LLC
> P.O. Box 201
> Newport VA 24128-0201
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> http://www.apsministries.org/ <http://www.apsministries.org/>
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> On Monday, April 11, 2016 2:23 AM, "Rob roomberg@... <mailto:roomberg@...> [regenrx]"
<regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>> wrote:
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>
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26105. 18 Ham Radio Stories by Don Thomas, W6LRG

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-12 05:17:38 UTC
From: Phil
Topic: 26105 Message: 26105

Hi All,
I believe I've mentioned my long time Radio Buddy, W6LRG ("Lazy Retired Guy", he's the one in his 80's I frequently help out).

For years he was an author for one of the local newspapers, the Merced County Times (it's free at many locations).

But he's also written some ham radio stories etc, and I believe also had some things published in ER Magazine (Electric Radio).

Today I ran across the CD that he gave me containing his article "18 Ham Radio Stories". It's also got some pictures of him and other things and I thought some of you might be interested. It's all in a zip file on my "Box" site.

NOTE: You DON'T need a Box membership to download, though I believe some folks have had problems in the past. . .

Here's the link to it.
https://app.box.com/s/il26ew46ms5q7j3bkpgmmnax6qdwk7mp

--
73 From "The Beaconeer's Lair"
Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)

PRESENT HF/LF RADIOS:
Grundigs: S-350 (~2006), G6 (2011) & S450DLX (2014).
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
Icom: IC-735 Transceiver (~1990).
Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
Icom: IC-7200 Transceiver (~2015).
R-Shack: DX-380 digital portable (~1990).
SDR: Softrock Ensemble II LF (built from a kit 2015).
Zenith: Royal-7000 Transoceanic Portable (~1968).

ACCESSORIES: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 4 Port Multicoupler, Feeds Antenna to 4 RX's.
HOMEBREW 8 Hz Audio Filter.

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

26106. Re: [regenrx] 18 Ham Radio Stories by Don Thomas, W6LRG

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-12 13:11:02 UTC
From: William Wood
Topic: 26105 Message: 26106

Thanks for the share Phil
Looks like it will be a fun read,
I only read the first page, then
skpped to a couple different
pages… :)
73 fer now
Bill KE9XQ

On Apr 12, 2016, at 12:17 AM, Phil ko6bb1@... [regenrx] <regenrx@yahoogroups.com> wrote:

> Hi All,
> I believe I've mentioned my long time Radio Buddy, W6LRG ("Lazy Retired
> Guy", he's the one in his 80's I frequently help out).
>
> For years he was an author for one of the local newspapers, the Merced
> County Times (it's free at many locations).
>
> But he's also written some ham radio stories etc, and I believe also had
> some things published in ER Magazine (Electric Radio).
>
> Today I ran across the CD that he gave me containing his article "18 Ham
> Radio Stories". It's also got some pictures of him and other things and
> I thought some of you might be interested. It's all in a zip file on my
> "Box" site.
>
> NOTE: You DON'T need a Box membership to download, though I believe
> some folks have had problems in the past. . .
>
> Here's the link to it.
> https://app.box.com/s/il26ew46ms5q7j3bkpgmmnax6qdwk7mp
>
> --

26107. Re: [regenrx] 18 Ham Radio Stories by Don Thomas, W6LRG

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-12 14:46:34 UTC
From: Phil
Topic: 26105 Message: 26107

Bill,
You're welcome. Enjoy.

73 From "The Beaconeer's Lair"
Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)

On 4/12/2016 1:11 PM, William Wood ke9xq@... [regenrx] wrote:
>
> Thanks for the share Phil
>
> Looks like it will be a fun read,
> I only read the first page, then
> skpped to a couple different
> pages? :)
> 73 fer now
> Bill KE9XQ
>
>
>
> On Apr 12, 2016, at 12:17 AM, Phil ko6bb1@...
> <mailto:ko6bb1@...> [regenrx] <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>> wrote:
>
>> Hi All,
>> I believe I've mentioned my long time Radio Buddy, W6LRG ("Lazy Retired
>> Guy", he's the one in his 80's I frequently help out).
>>
>> For years he was an author for one of the local newspapers, the Merced
>> County Times (it's free at many locations).
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>> But he's also written some ham radio stories etc, and I believe also had
>> some things published in ER Magazine (Electric Radio).
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>> Today I ran across the CD that he gave me containing his article "18 Ham
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>> some folks have had problems in the past. . .
>>
>> Here's the link to it.
>> https://app.box.com/s/il26ew46ms5q7j3bkpgmmnax6qdwk7mp
>>

>> --
>>

26108. Radio for the Millions PDF IF 60MB is too big to download

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-12 15:54:19 UTC
From: Rob
Topic: 26094 Message: 26108

I have downloaded an entire library of PDF books.
It seems like there are ways to make a PDF that is smaller.
I noticed that the Radio for the Millions PDF is 60MB.
But some of my downloaded PDF books... same number of pages and lots of
hand drawn circuits
are only 15 MB.
So I would like to figure out how to convert the fat PDFs into much
smaller PDFs... and then perhaps
downloads would be 10 times quicker to share.

If anyone has a problem downloading the 60 MB Radio For The Millions
book I would share it on a DVD since they only cost a quarter.

Some day I may actually digitize my paper copy of this book if I figure
out how to make it any smaller than 60 MB.

On 04/11/2016 11:40 PM, Robert S Jenkins qrp@... [regenrx] wrote:
>
> https://archive.org/details/RadioForTheMillions
>
> Robert
> KG4KGL
>
>
>
>> On Apr 11, 2016, at 11:27 PM, Alvin Schmitt schmitt_alvin@...
>> <mailto:schmitt_alvin@...> [regenrx] <regenrx@yahoogroups.com
>> <mailto:regenrx@yahoogroups.com>> wrote:
>>
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>> what is the URL?
>> Alvin P. Schmitt
>>
>> APSTRON LLC
>> P.O. Box 201
>> Newport VA 24128-0201
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>> 1-888-730-6478
>>
>> http://www.apsministries.org/ <http://www.apsm%0A%20inistries.org/>
>>
>>
>> On Monday, April 11, 2016 2:23 AM, "Robroomberg@...
>> <mailto:roomberg@...>[regenrx]" <regenrx@yahoogroups.com
>> <mailto:regenrx@yahoogroups.com>> wrote:
>>

>>
>> Radio for the Millions is available as a 60MB PDF download.
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26109. Re: [regenrx] Radio for the Millions PDF IF 60MB is too big to download

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-12 16:30:09 UTC
From: Cecil Bayona
Topic: 26094 Message: 26109

That books is made up of pictures of the pages, that is why it's so bulky.

On 4/12/2016 10:54 AM, Rob roomberg@... [regenrx] wrote:
>
> I have downloaded an entire library of PDF books.
> It seems like there are ways to make a PDF that is smaller.
> I noticed that the Radio for the Millions PDF is 60MB.
> But some of my downloaded PDF books... same number of pages and lots
> of hand drawn circuits
> are only 15 MB.
> So I would like to figure out how to convert the fat PDFs into much
> smaller PDFs... and then perhaps
> downloads would be 10 times quicker to share.
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> If anyone has a problem downloading the 60 MB Radio For The Millions
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>>> Radio for the Millions is available as a 60MB PDF download.
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> ---
> Posted by: Rob <roomberg@...>
> ---
> <https://groups.yahoo.com/neo/groups/regenrx/conversations/messages/26108;_ylc=X3oDMTJyY
2owZ2wzBF9TAzk3MzU5NzE0BGdycElkAzEzOTk2OTA3BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAMyNjEwOARzZWM
DZnRyBHNsawNycGx5BHN0aW1lAzE0NjA0NzY0NjQ-?act=reply&messageNum=26108>
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Cecil - k5nwa
http://thepartsplace.k5nwa.com/

26110. Re: [regenrx] Radio for the Millions PDF IF 60MB is too big to download

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-12 16:27:29 UTC
From: Alvin Schmitt
Topic: 26094 Message: 26110

Might be the same number of pages but there is more white space in one than in the other (color pictures require a great deal of space). Realize that someone has already looked at this and optimized it all before you even thought about it. Black text and line drawings require the least amount of space since a pdf is a bunch of vectors generated and decoded by postscript. Alvin P. Schmitt

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1-888-730-6478
http://www.apsministries.org/

On Tuesday, April 12, 2016 11:54 AM, "Rob roomberg@... [regenrx]" <regenrx@yahoogroups.com> wrote:

  I have downloaded an entire library of PDF books.
It seems like there are ways to make a PDF that is smaller.
I noticed that the Radio for the Millions PDF is 60MB.
But some of my downloaded PDF books... same number of pages and lots of hand drawn circuits are only 15 MB.
So I would like to figure out how to convert the fat PDFs into much smaller PDFs... and then perhaps
downloads would be 10 times quicker to share.

If anyone has a problem downloading the 60 MB Radio For The Millions book I would share it on a DVD since they only cost a quarter.

Some day I may actually digitize my paper copy of this book if I figure out how to make it any smaller than 60 MB.

On 04/11/2016 11:40 PM, Robert S Jenkins qrp@... [regenrx] wrote:

https://archive.org/details/RadioForTheMillions
Robert KG4KGL

On Apr 11, 2016, at 11:27 PM, Alvin Schmitt schmitt_alvin@... [regenrx] <regenrx@yahoogroups.com> wrote:

what is the URL?   Alvin P. Schmitt

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P.O. Box 201 Newport VA 24128-0201

1-888-730-6478
http://www.apsministries.org/

On Monday, April 11, 2016 2:23 AM, "Rob roomberg@... [regenrx]" <regenrx@...m> wrote:

Radio for the Millions is available as a 60MB PDF download.

26111. Radio for the Millions PDF is now 34 MB

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-12 17:12:38 UTC
From: Rob
Topic: 26094 Message: 26111

Well guys..... that was interesting.
On LINUX MINT PC I opened the 61 MB PDF to read it and then printed it.
PRINT has the option to output as a file so I chose PDF and then the new
PDF output file
was created, no resolutions defined by me, it just was created in 20
seconds... as a 34MB PDF.
Which is just fine to read the text and the circuits.

So don't be so quick to declare WHY its so bulky or that someone has
already looked at this and optimized it all before you even thought
about it.
BECAUSE
I'm just getting started on how to reduce these fat PDFs even more.

Anytime I open a PDF file using a PAINT type program .....like GIMP ....
it asks to specify paper size ... in pixels or inches and resolution.
Playing with those numbers can tweak the resulting image size to much
much bigger or smaller final image saved size.... and that JPG can be
experted to PDF... where there are more options to choose output file
sizing.

So without playing with all those tweakage options... I already cut the
file size in half just by printing it to PDF.

And just out of curiosity I opened the 34MB PDF in the PDF reader and
told that to print again to output PDF file...
which produced another 34MB PDF. So its not like every PDF output
print would go smaller. It defined a specific size
resolution and printed it without giving me any options.

On 04/12/2016 12:30 PM, Cecil Bayona cecil.bayona@... [regenrx] wrote:
That books is made up of pictures of the pages, that is why it's so bulky.

On 04/12/2016 12:27 PM, Alvin Schmitt schmitt_alvin@... [regenrx]
wrote:
> Might be the same number of pages but there is more white space in one
> than in the other (color pictures require a great deal of space).
> Realize that someone has already looked at this and optimized it all
> before you even thought about it. Black text and line drawings require
> the least amount of space since a pdf is a bunch of vectors generated
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> On Tuesday, April 12, 2016 11:54 AM, "Rob roomberg@... [regenrx]"
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> I noticed that the Radio for the Millions PDF is 60MB.
> But some of my downloaded PDF books... same number of pages and lots
> of hand drawn circuits
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>>>
>>>
>>> Radio for the Millions is available as a 60MB PDF download.
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26112. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-12 23:43:56 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 26112

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Leonard's Stuff/Mk.28 Mod 2a.bmp
Uploaded by : leonardmeek <lemeek@...>
Description : Improved schematic

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Leonard%27s%20Stuff/Mk.28%20Mod%202a.bmp

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

leonardmeek <lemeek@...>

26113. Mk.28

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-13 00:03:14 UTC
From: Leonard Meek
Topic: 21560 Message: 26113

I just uploaded the latest schemo of my improved Mk.28 Supergenodyne. Some changes are actual wiring changes, others are drawing error corrections. Again, I found the 12AU7 gave better results than the 6DJ8 for the LO. The 6DJ8 is better in the 2nd RF stage. The audio and PS are on a separate chassis. The AGC works better (no hicups) but is still overloaded on local stations. Time to move on.

Leonard

26114. Re: [regenrx] Mk.28

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-13 00:24:59 UTC
From: Prof. Arnaldo Coro Antich
Topic: 21560 Message: 26114

Hola amigos !
Nice to see the list alive...
will appreciate ver much if Leonard can send the
schematic of the MK28 Superregenerodyne to
my GMAIL address, as it is a lot easier for me to
pick the files there than to try to access the YAHOO
list from my slow connection...
The 12AU7 is an excellent tube, still in production
in Russia... It is, according to my analysis of the
tube's parameters, just to 6C4 classic triodes
packed into the same glass envelope !!! Right ???

73 and DX
Arnie Coro
CO2KK
Host of Dxers Unlimited radio hobby program
Radio Havana Cuba

On 12/04/16 20:03, 'Leonard Meek' lemeek@... [regenrx] wrote:
> I just uploaded the latest schemo of my improved Mk.28 Supergenodyne. Some
> changes are actual wiring changes, others are drawing error corrections.
> Again, I found the 12AU7 gave better results than the 6DJ8 for the LO. The
> 6DJ8 is better in the 2nd RF stage. The audio and PS are on a separate
> chassis. The AGC works better (no hicups) but is still overloaded on local
> stations. Time to move on.
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> Leonard
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26115. Re: [regenrx] Mk.28

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-13 00:38:23 UTC
From: Prof. Arnaldo Coro Antich
Topic: 21560 Message: 26115

OH... forgot to include the GMAIL
arnaldo dot coro at gmail dot com

please excuse me for extra bandwidth
73 and DX
Arnie

On 12/04/16 20:24, 'Prof. Arnaldo Coro Antich' coro@... [regenrx] wrote:
> Hola amigos !
> Nice to see the list alive...
> will appreciate ver much if Leonard can send the
> schematic of the MK28 Superregenerodyne to
> my GMAIL address, as it is a lot easier for me to
> pick the files there than to try to access the YAHOO
> list from my slow connection...
> The 12AU7 is an excellent tube, still in production
> in Russia... It is, according to my analysis of the
> tube's parameters, just to 6C4 classic triodes
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> On 12/04/16 20:03, 'Leonard Meek' lemeek@... [regenrx] wrote:
>> I just uploaded the latest schemo of my improved Mk.28 Supergenodyne. Some
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>> Again, I found the 12AU7 gave better results than the 6DJ8 for the LO. The
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26116. Etching Aluminum question

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-13 01:37:21 UTC
From: William Wood
Topic: 26116 Message: 26116

Hey Greetings Everyone
I bought a used cake pan and nice cookie sheet today,
and while I was waiting in the car for my wife to do her
shopping, I took some steel wool and started cleaning these
guys up. Pretty cruddy looking for being sold at good will.
Anyway, after about 45 minutes of cleaning these guys up,
I decided to get some etchant to give them a nice satin finish.
When I got home, I painted the inside of the cake pan with
the etchant and played with the thing for about 45 more minutes.
After rincing and cleaning it up it looked OK, but not the nice soft
satin i was hoping for. Perhaps the cold temp??? 50 degrees
would slow the etching process down a bit, so will wait for a nice
warmer day to try it again. Thought I'd ask you gurus if there was
a secret to getting the satin finish that will also cover up the small
scratches the steel wool did not clean up. I started cleaning these
up with a medium grade, and finished up with a brand x I think
almost ought 4 grade of wool, and if the inside does not look better
next time around, I am going to stick with the polished with steel
wool on the outside. It looks better then the etching does…
OK, any ideas??? Would like this to look like a million dollars.
I bought them because they looked good together, I did not have
a project in mind for them as of yet. The acid I bought was Muratic
and I used it full strength, as I had planned on sitting there until
the job was done…
Thanks for any feedback and critiquing and
73 fer now
Bill KE9XQ

26117. Re: [regenrx] Etching Aluminum question

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-13 01:41:39 UTC
From: William Wood
Topic: 26116 Message: 26117

That should have read 0000, 4 aught
not aught 4 :)

On Apr 12, 2016, at 8:37 PM, William Wood ke9xq@... [regenrx] <regenrx@yahoogroups.com> wrote:

> Hey Greetings Everyone
> I bought a used cake pan and nice cookie sheet today,
> and while I was waiting in the car for my wife to do her
> shopping, I took some steel wool and started cleaning these
> guys up. Pretty cruddy looking for being sold at good will.
> Anyway, after about 45 minutes of cleaning these guys up,
> I decided to get some etchant to give them a nice satin finish.
> When I got home, I painted the inside of the cake pan with
> the etchant and played with the thing for about 45 more minutes.
> After rincing and cleaning it up it looked OK, but not the nice soft
> satin i was hoping for. Perhaps the cold temp??? 50 degrees
> would slow the etching process down a bit, so will wait for a nice
> warmer day to try it again. Thought I'd ask you gurus if there was
> a secret to getting the satin finish that will also cover up the small
> scratches the steel wool did not clean up. I started cleaning these
> up with a medium grade, and finished up with a brand x I think
> almost ought 4 grade of wool, and if the inside does not look better
> next time around, I am going to stick with the polished with steel
> wool on the outside. It looks better then the etching does…
> OK, any ideas??? Would like this to look like a million dollars.
> I bought them because they looked good together, I did not have
> a project in mind for them as of yet. The acid I bought was Muratic
> and I used it full strength, as I had planned on sitting there until
> the job was done…
> Thanks for any feedback and critiquing and
> 73 fer now
> Bill KE9XQ
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26119. Re: Etching Aluminum question

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-13 12:45:55 UTC
From: david.newkirk@...
Topic: 26116 Message: 26119

Silk finish on aluminum chassis in vintage QSTs and ARRL Handbooks was done by bathing metal in lye-and-water mix, rinsing, and then buffing off residue. Find an old Handbook that describes that technique and follow it. Practice on scrap piece(s) first.

26120. Re: [regenrx] Mk.28

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-13 12:52:34 UTC
From: david.newkirk@...
Topic: 21560 Message: 26120

Yes, 12AU7 is 2x 6C4. Think total max plate dissipation is derated somewhat due to close proximity of the two sections.

26122. Re: [regenrx] Etching Aluminum question

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-13 16:22:06 UTC
From: Gary Pewitt
Topic: 26116 Message: 26122

To clean and etch aluminum you don't want acid, you want alkali. A lye solution will clean and leave a nice matt finish.

On 04/12/2016 08:37 PM, William Wood ke9xq@... [regenrx] wrote:
> Hey Greetings Everyone
> I bought a used cake pan and nice cookie sheet today,
> and while I was waiting in the car for my wife to do her
> shopping, I took some steel wool and started cleaning these
> guys up. Pretty cruddy looking for being sold at good will.
> Anyway, after about 45 minutes of cleaning these guys up,
> I decided to get some etchant to give them a nice satin finish.
> When I got home, I painted the inside of the cake pan with
> the etchant and played with the thing for about 45 more minutes.
> After rincing and cleaning it up it looked OK, but not the nice soft
> satin i was hoping for. Perhaps the cold temp??? 50 degrees
> would slow the etching process down a bit, so will wait for a nice
> warmer day to try it again. Thought I?d ask you gurus if there was
> a secret to getting the satin finish that will also cover up the small
> scratches the steel wool did not clean up. I started cleaning these
> up with a medium grade, and finished up with a brand x I think
> almost ought 4 grade of wool, and if the inside does not look better
> next time around, I am going to stick with the polished with steel
> wool on the outside. It looks better then the etching does?
> OK, any ideas??? Would like this to look like a million dollars.
> I bought them because they looked good together, I did not have
> a project in mind for them as of yet. The acid I bought was Muratic
> and I used it full strength, as I had planned on sitting there until
> the job was done?
> Thanks for any feedback and critiquing and
> 73 fer now
> Bill KE9XQ
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26123. Re: [regenrx] Etching Aluminum question

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-13 16:34:36 UTC
From: Jim Wiley
Topic: 26116 Message: 26123

One more thing: Try to avoid the steel wool, and instead use fine to very fine grades of wet and dry sandpaper. The steel wool will will "stick" in the surface scratches of the aluminum, and even if you can't see them, the remaining steel wool "fibers" will eventually become oxidized (rusty) and ruin the appearance of the work. Learned this a few years back when attempting to clean up a project box.

- Jim, KL7CC

On 4/13/2016 8:22 AM, Gary Pewitt garypewitt@... [regenrx] wrote:
> To clean and etch aluminum you don't want acid, you want alkali. A lye
> solution will clean and leave a nice matt finish.
>
> On 04/12/2016 08:37 PM, William Wood ke9xq@... [regenrx] wrote:
>> Hey Greetings Everyone
>> I bought a used cake pan and nice cookie sheet today,
>> and while I was waiting in the car for my wife to do her
>> shopping, I took some steel wool and started cleaning these
>> guys up. Pretty cruddy looking for being sold at good will.
>> Anyway, after about 45 minutes of cleaning these guys up,
>> I decided to get some etchant to give them a nice satin finish.
>> When I got home, I painted the inside of the cake pan with
>> the etchant and played with the thing for about 45 more minutes.
>> After rincing and cleaning it up it looked OK, but not the nice soft
>> satin i was hoping for. Perhaps the cold temp??? 50 degrees
>> would slow the etching process down a bit, so will wait for a nice
>> warmer day to try it again. Thought I'd ask you gurus if there was
>> a secret to getting the satin finish that will also cover up the small
>> scratches the steel wool did not clean up. I started cleaning these
>> up with a medium grade, and finished up with a brand x I think
>> almost ought 4 grade of wool, and if the inside does not look better
>> next time around, I am going to stick with the polished with steel
>> wool on the outside. It looks better then the etching does…
>> OK, any ideas??? Would like this to look like a million dollars.
>> I bought them because they looked good together, I did not have
>> a project in mind for them as of yet. The acid I bought was Muratic
>> and I used it full strength, as I had planned on sitting there until
>> the job was done…
>> Thanks for any feedback and critiquing and
>> 73 fer now
>> Bill KE9XQ
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26124. Re: [regenrx] Etching Aluminum question

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-13 18:06:55 UTC
From: hudakjm@...
Topic: 26116 Message: 26124

The reaction between aluminum and lye, or sodium hydroxide, produces sodium aluminate, which is the white-ish or grey-ish deposit you'll see forming on your aluminum. Just wipe or rinse it off.

The gas that is given off is hydrogen, so do not do this in an enclosed area and do not do it near an open flame or any source of flame or spark. Hydrogen if flammable and explosive.

Otherwise this technique is a good one for producing a nice satin finish on aluminum. It won't get rid of really deep gouges or scratches though. Those you have to remove with some elbow grease first.

Good luck.

John
VE3CXB

26125. Re: oscillators again

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-13 18:27:48 UTC
From: deadgoose@...
Topic: 26076 Message: 26125

See if you can find "Functional Circuits and Oscillators," by Herbert J. Reich. All of them are there. Anything that provides positive feedback will oscillate if there is sufficient loop gain. Look up the topic of "negative resistance."

Spoiler alert -- H. J. Reich was one of my professors.

73 /paul W3FIS

26126. Re: [regenrx] Re: oscillators again

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-13 19:06:30 UTC
From: Leonard Meek
Topic: 26076 Message: 26126

Just got a free copy off the internet.

Leonard

----- Original Message -----
From: deadgoose@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Wednesday, April 13, 2016 8:27 AM
Subject: [regenrx] Re: oscillators again

See if you can find "Functional Circuits and Oscillators," by Herbert J. Reich. All of them are there. Anything that provides positive feedback will oscillate if there is sufficient loop gain. Look up the topic of "negative resistance."

Spoiler alert -- H. J. Reich was one of my professors.

73 /paul W3FIS

26127. Possible discussion group ???

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-13 19:30:01 UTC
From: William Wood
Topic: 26127 Message: 26127

Hey Guys
This latest oscillator book gave me
an idea. Some of you have been around
the block a few times, and others maybe
haven't gotten to the corner yet. So, I have
no book in mind, mind you, what if we chose
a book and go through it a chapter per week,
discuss, debate add to and learn a subject
inside and out. Like that oscillator book,
or if you could find one focusing on regens
there would be little or no off topic discussions
then. It would help if the book were readily
available to all interested parties, and those
of you that know the subject well, can kibbutz
or add to the knowledge base as you saw fit.
That way there is something for everyone.
A little learning/tutoring and when we are done,
we might know what we are talking about.
No plans yet, just debate the idea and give
us a dozen books worth our efforts…
What Say Ye?
73 fer now
Bill KE9XQ
PS if a chapter per week is too fast for some,
we could do two weeks, or as long as the
discussion lasts… juss thinkin

26128. Re: [regenrx] Possible discussion group ??? say Ye

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-13 20:44:00 UTC
From: Rob
Topic: 26127 Message: 26128

I bought the 1964 OSCILLATOR CIRCUITS Adams book because it was
described as
understandable for newbies and because it was 125 pages written without
expecting me to
have a PHD in math and electronics.

I have a library of tube and radio books that are 400 pages of theory
with calculations
made up of symbols I can't even make appear in an email text.
So I figured this would be a good resource to examine.... and share.

I will scan it to share it online and then anyone can comment without
guessing how to chase down a page.

On 04/13/2016 03:30 PM, William Wood ke9xq@... [regenrx] wrote:
> Hey Guys
> This latest oscillator book gave me
> an idea. Some of you have been around
> the block a few times, and others maybe
> haven’t gotten to the corner yet. So, I have
> no book in mind, mind you, what if we chose
> a book and go through it a chapter per week,
> discuss, debate add to and learn a subject
> inside and out. Like that oscillator book,
> or if you could find one focusing on regens
> there would be little or no off topic discussions
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> available to all interested parties, and those
> of you that know the subject well, can kibbutz
> or add to the knowledge base as you saw fit.
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> A little learning/tutoring and when we are done,
> we might know what we are talking about.
> No plans yet, just debate the idea and give
> us a dozen books worth our efforts…
> What Say Ye?
> 73 fer now
> Bill KE9XQ
> PS if a chapter per week is too fast for some,
> we could do two weeks, or as long as the
> discussion lasts… juss thinkin
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> "In the interest of Regenerating radio's lost art of Regeneration"
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26129. Re: [regenrx] Possible discussion group ??? say Ye

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-13 21:37:02 UTC
From: Dan Yoder
Topic: 26127 Message: 26129

Sounds good to me thanks

Sent from my iPhone

> On Apr 13, 2016, at 4:44 PM, Rob roomberg@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
> I bought the 1964 OSCILLATOR CIRCUITS Adams book because it was
> described as
> understandable for newbies and because it was 125 pages written without
> expecting me to
> have a PHD in math and electronics.
>
> I have a library of tube and radio books that are 400 pages of theory
> with calculations
> made up of symbols I can't even make appear in an email text.
> So I figured this would be a good resource to examine.... and share.
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> I will scan it to share it online and then anyone can comment without
> guessing how to chase down a page.
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>> On 04/13/2016 03:30 PM, William Wood ke9xq@... [regenrx] wrote:
>> Hey Guys
>> This latest oscillator book gave me
>> an idea. Some of you have been around
>> the block a few times, and others maybe
>> haven’t gotten to the corner yet. So, I have
>> no book in mind, mind you, what if we chose
>> a book and go through it a chapter per week,
>> discuss, debate add to and learn a subject
>> inside and out. Like that oscillator book,
>> or if you could find one focusing on regens
>> there would be little or no off topic discussions
>> then. It would help if the book were readily
>> available to all interested parties, and those
>> of you that know the subject well, can kibbutz
>> or add to the knowledge base as you saw fit.
>> That way there is something for everyone.
>> A little learning/tutoring and when we are done,
>> we might know what we are talking about.
>> No plans yet, just debate the idea and give
>> us a dozen books worth our efforts…
>> What Say Ye?

>> 73 fer now
>> Bill KE9XQ
>> PS if a chapter per week is too fast for some,
>> we could do two weeks, or as long as the
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26130. Re: [regenrx] Possible discussion group ???

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-13 23:04:13 UTC
From: Brian Ford
Topic: 26127 Message: 26130

blockquote, div.yahoo_quoted { margin-left: 0 !important; border-left:1px #715FFA solid !important; padding-left:1ex !important; background-color:white !important; } That would be interesting, I would check in for that.

Sent from Yahoo Mail for iPad

On Wednesday, April 13, 2016, 14:31, William Wood ke9xq@... [regenrx] <regenrx@yahoogroups.com> wrote:

Hey Guys
  This latest oscillator book gave me
an idea. Some of you have been around
the block a few times, and others maybe
haven't gotten to the corner yet. So, I have
no book in mind, mind you, what if we chose
a book and go through it a chapter per week,
discuss, debate add to and learn a subject
inside and out. Like that oscillator book,
or if you could find one focusing on regens
there would be little or no off topic discussions
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of you that know the subject well, can kibbutz
or add to the knowledge base as you saw fit.
That way there is something for everyone.
A little learning/tutoring and when we are done,
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  No plans yet, just debate the idea and give
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What Say Ye?
73 fer now
Bill KE9XQ
PS if a chapter per week is too fast for some,
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discussion lasts… juss thinkin

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Yahoo Groups Links

26131. Re: [regenrx] That good old-time AC-DC project

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-14 01:22:45 UTC
From: david.newkirk@...
Topic: 26094 Message: 26131

Bill wrote:

> These radios are called AC/DC because they will run from the 120 volt AC
> line *_OR_* from 120 volts DC. So such a radio could be operated from a
> battery supply - perhaps with a multivibrator type of "inverter" to give
> 120 volts DC output from 12 volts DC input.

The "dc" capability was for more than just battery supply. Some pretty large sections of major cities had 120 V _dc_ mains (a side-effect of dc supply for streetcars/subways), even until relatively recently. In New York City, for instance, Consolidated Edison switched its last dc customer over to ac in _2007_ per this press release:

Con Edison: newsroom - news release - A/C But No D/C: Last Con Edison Direct Current Customer is History http://www.coned.com/newsroom/news/pr20071115.asp

http://www.coned.com/newsroom/news/pr20071115.asp

Con Edison: newsroom - news release - A/C But No D/C: L...
http://www.coned.com/newsroom/news/pr20071115.asp newsroom Specify Target Language Language -- Select -- Arabic Bulgarian

View on www.coned.com http://www.coned.com/newsroom/news/pr20071115.asp
Preview by Yahoo

And BTW that wasn't necessarily very clean dc. I recall here and that that the dc supplied commonly had more than a little commutator ripple on the feed.

Best regards,

Dave
amateur radio W9BRD

26132. RE: [regenrx] That good old-time AC-DC project

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-14 02:19:15 UTC
From: Hubert Miller
Topic: 26094 Message: 26132

Hard for me to believe that actual residences were supplied with DC, altho i suppose it was possible. That would make life near impossible, wouldn't it, for home appliances?
I cannot think of a single 115 DC refrigerator on the market. Think about rechargeable appliances and TVs.

Somewhere i read about an incident in NYC where someone plugged in an AC radio to their DC supply, with predictable results. I wish i could remember where i saw that article and how long ago this incident was supposed to have happened.

I have a Philco Tropic radio with multiple SW bands, that was, i was told, made for 240 volts DC in Europe. I don't know how accurate that is; i suppose i'll need to find the original schematic to verify that. It DOES use a couple battery tubes in the output ONLY - type 49 - and because of this, there's a pretty good AC hum always - due to AC on the tube filaments now. I looked at tube manuals for quite a while, trying to choose a sub for the 49 tetrode, but i think eventually i'll just put in a small DC supply for these 2 tubes' filaments.
-Hue Miller

>The "dc" capability was for more than just battery supply. Some pretty large sections of major cities had 120 V _dc_ mains (a side-effect of dc supply for streetcars/subways), even until relatively recently. In New York City, for instance, Consolidated Edison switched its last dc customer over to ac in _2007_ per this press release:

http://www.coned.com/newsroom/news/pr20071115.asp

And BTW that wasn't necessarily very clean dc. I recall here and that that the dc supplied commonly had more than a little commutator ripple on the feed.

Best regards,

Dave
amateur radio W9BRD

26133. Re: RE: [regenrx] That good old-time AC-DC project

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-14 02:38:25 UTC
From: Will
Topic: 26094 Message: 26133

Hi Hue,

Yes 240 DC was used in Europe. I was around Southhampton, (UK) in late 60's and they were slowy changing over.

TV's and Mains powered radios worked with little problem. Troubles arose when TV's went to solid state diodes, one for HT and another in reverse direction for filement supply, saved on dropper resistors and improved the current balance of AC current.. Of course working on chassis at -240 was not comfortable. As was working on chassis connected to 240 AC the wrong way round.

Every thing transformerless of course, anyway transformers cost money!!

Cheers
Will
ZL1TAO

Sent: Thursday, April 14, 2016 at 2:19 PM
From: "Hubert Miller kargo_cult@... [regenrx]"
To: regenrx@yahoogroups.com
Subject: RE: [regenrx] That good old-time AC-DC project

Hard for me to believe that actual residences were supplied with DC, altho i suppose it was possible. That would make life near impossible, wouldn't it, for home appliances?
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article and how long ago this incident was supposed to have happened.

I have a Philco Tropic radio with multiple SW bands, that was, i was told, made for 240 volts DC in Europe. I don't know how accurate that is; i suppose i'll need to find the original schematic to verify that. It DOES use a couple battery tubes in the output ONLY - type 49 - and because of this, there's a pretty good AC hum always - due to AC
on the tube filaments now. I looked at tube manuals for quite a while, trying to choose a sub for the 49 tetrode, but i think eventually i'll just put in a small DC supply for these 2 tubes' filaments.
-Hue Miller

>The "dc" capability was for more than just battery supply. Some pretty large sections of major cities had 120 V _dc_ mains (a side-effect of dc supply for streetcars/subways), even until relatively recently. In New York City, for instance, Consolidated Edison switched its last dc customer over to ac in _2007_ per this press release:

http://www.coned.com/newsroom/news/pr20071115.asp

And BTW that wasn't necessarily very clean dc. I recall here and that that the dc supplied commonly had more than a little commutator ripple on the feed.

Best regards,

Dave
amateur radio W9BRD

26134. SHARED ONLINE 50 YEAR OLD OSCILLATOR BOOK

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-14 04:51:37 UTC
From: Rob
Topic: 26127 Message: 26134

HERES YOUR BOOK:
http://kid-power.us/book/index.html

On 04/13/2016 07:04 PM, Brian Ford kf4tap@... [regenrx] wrote:
>
> That would be interesting, I would check in for that.
>
>
> Sent from Yahoo Mail for iPad <https://yho.com/footer0>
>
> On Wednesday, April 13, 2016, 14:31, William Wood ke9xq@...
> [regenrx] <regenrx@yahoogroups.com> wrote:
>
> Hey Guys
> This latest oscillator book gave me
> an idea. Some of you have been around
> the block a few times, and others maybe
> haven’t gotten to the corner yet. So, I have
> no book in mind, mind you, what if we chose
> a book and go through it a chapter per week,
> discuss, debate add to and learn a subject
> inside and out. Like that oscillator book,
> or if you could find one focusing on regens
> there would be little or no off topic discussions
> then. It would help if the book were readily
> available to all interested parties, and those
> of you that know the subject well, can kibbutz
> or add to the knowledge base as you saw fit.
> That way there is something for everyone.
> A little learning/tutoring and when we are done,
> we might know what we are talking about.
> No plans yet, just debate the idea and give
> us a dozen books worth our efforts…
> What Say Ye?
> 73 fer now
> Bill KE9XQ
> PS if a chapter per week is too fast for some,
> we could do two weeks, or as long as the
> discussion lasts… juss thinkin
>
> ------------------------------------
>
> ------------------------------------
>
> "In the interest of Regenerating radio's lost art of Regeneration"

> ------------------------------------
>
> Yahoo Groups Links
>
>
>
>

26135. Re: Top Tenning

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-14 08:41:50 UTC
From: dawmast@...
Topic: 20700 Message: 26135

Here are two BJT regenerative receivers in which the base-collector junctions have been reverse-biased to avoid these above-mentioned problems.

http://www.uploadarchief.net/files/download/retroradio%281%29.gif
http://www.uploadarchief.net/files/download/retroradio%281%29.gif

http://www.uploadarchief.net/files/download/retroradio%281%29.gif

http://www.uploadarchief.net/files/download/retroradio%2...
http://www.uploadarchief.net/files/download/retroradio%281%29.gif

View on www.uploadarchief.net
http://www.uploadarchief.net/files/download/retroradio%281%29.gif
Preview by Yahoo

http://www.uploadarchief.net/files/download/basicregen%282%29.gif
http://www.uploadarchief.net/files/download/basicregen%282%29.gif

http://www.uploadarchief.net/files/download/basicregen%282%29.gif

http://www.uploadarchief.net/files/download/basicregen...
http://www.uploadarchief.net/files/download/basicregen%282%29.gif

View on www.uploadarchief.net
http://www.uploadarchief.net/files/download/basicregen%282%29.gif
Preview by Yahoo

26136. Re: Top Tenning

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-14 09:15:14 UTC
From: qrp.gaijin@...
Topic: 20700 Message: 26136

Hi,

Interesting circuits, drm1173. Did you notice any audible improvement by making these changes, and if so, what kind of improvement did you hear?

qrp.gaijin@yahoo.com
http://qrp-gaijin.blogpspot.com http://qrp-gaijin.blogpspot.com

26137. Re: RE: [regenrx] That good old-time AC-DC project

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-14 10:12:37 UTC
From: david.newkirk@...
Topic: 26094 Message: 26137

Will wrote:

> Yes 240 DC was used in Europe. I was around Southhampton, (UK) in late 60's
> and they were slowy changing over.

Yes, and a look at the "Type of current" column in the "all countries" listing at http://www.trade.gov/mas/ian/ecw/all.html http://www.trade.gov/mas/ian/ecw/all.html is eye-opening, as some countries remain on dc feed.

Best regards,

Dave
amateur radio W9BRD

26138. Re: [regenrx] SHARED ONLINE 50 YEAR OLD OSCILLATOR BOOK

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-14 11:37:17 UTC
From: Adrian Flynn
Topic: 26127 Message: 26138

Thank you

73
Adrian KF7DYU
On Apr 14, 2016 12:51 AM, "Rob roomberg@... [regenrx]" <
regenrx@yahoogroups.com> wrote:

>
>
> HERES YOUR BOOK:
> http://kid-power.us/book/index.html
>
>
>
>
> On 04/13/2016 07:04 PM, Brian Ford kf4tap@... [regenrx] wrote:
>
>
>
> That would be interesting, I would check in for that.
>
>
> Sent from Yahoo Mail for iPad <https://yho.com/footer0>
>
> On Wednesday, April 13, 2016, 14:31, William Wood ke9xq@charter.net
> [regenrx] <regenrx@yahoogroups.com> <regenrx@yahoogroups.com> wrote:
>
> Hey Guys
> This latest oscillator book gave me
> an idea. Some of you have been around
> the block a few times, and others maybe
> haven’t gotten to the corner yet. So, I have
> no book in mind, mind you, what if we chose
> a book and go through it a chapter per week,
> discuss, debate add to and learn a subject
> inside and out. Like that oscillator book,
> or if you could find one focusing on regens
> there would be little or no off topic discussions
> then. It would help if the book were readily
> available to all interested parties, and those
> of you that know the subject well, can kibbutz
> or add to the knowledge base as you saw fit.
> That way there is something for everyone.
> A little learning/tutoring and when we are done,
> we might know what we are talking about.

> No plans yet, just debate the idea and give
> us a dozen books worth our efforts…
> What Say Ye?
> 73 fer now
> Bill KE9XQ
> PS if a chapter per week is too fast for some,
> we could do two weeks, or as long as the
> discussion lasts… juss thinkin
>
> ------------------------------------
>
> ------------------------------------
>
> "In the interest of Regenerating radio's lost art of Regeneration"
> ------------------------------------
>
> Yahoo Groups Links
>
>
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>

26139. Re: [regenrx] SHARED ONLINE 50 YEAR OLD OSCILLATOR BOOK

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-14 12:32:45 UTC
From: Michael
Topic: 26127 Message: 26139

Is there an easy way to download all these jpg pages together,
rather than each jpg pageseparately?

Michael

On 14.04.16 05:51, Rob roomberg@... [regenrx] wrote:
> HERES YOUR BOOK:
>
> http://kid-power.us/book/index.html
>
> On 04/13/2016 07:04 PM, Brian Ford kf4tap@... [regenrx] wrote:
>
> That would be interesting, I would check in for that.

26140. Re: [regenrx] SHARED ONLINE 50 YEAR OLD OSCILLATOR BOOK

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-14 12:49:20 UTC
From: William Wood
Topic: 26127 Message: 26140

Thanks Man
I have a copy of this, but
I downloaded it too, nice
to be able to blow it up and
focus on the point of interest.
So, thanks for doing that. :)
73 fer now
Bill KE9XQ

On Apr 13, 2016, at 11:51 PM, Rob roomberg@ptd.net [regenrx] <regenrx@yahoogroups.com> wrote:

> HERES YOUR BOOK:
> http://kid-power.us/book/index.html
>
>
>
>
>
> On 04/13/2016 07:04 PM, Brian Ford kf4tap@... [regenrx] wrote:
>>
>> That would be interesting, I would check in for that.
>>
>>

26141. Re: [regenrx] SHARED ONLINE 50 YEAR OLD OSCILLATOR BOOK

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-14 13:16:17 UTC
From: Phil
Topic: 26127 Message: 26141

I Use a Firefox add-on called "Down Them All" all the time. It will
allow you to download ALL the files of a specified type at once. You ca
specify the type as "Documents", Images and so forth, or a specific type
such as .jpg. I collect Old Time Radio shows, usually in mp3 or zip
format and have downloaded literally thousands of files with D-T-A.

73 From "The Beaconeer's Lair"
Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)

PRESENT HF/LF RADIOS:
Grundigs: S-350 (~2006), G6 (2011) & S450DLX (2014).
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
Icom: IC-735 Transceiver (~1990).
Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
Icom: IC-7200 Transceiver (~2015).
R-Shack: DX-380 digital portable (~1990).
SDR: Softrock Ensemble II LF (built from a kit 2015).
Zenith: Royal-7000 Transoceanic Portable (~1968).

ACCESSORIES: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 4 Port Multicoupler, Feeds Antenna to 4 RX's.
HOMEBREW 8 Hz Audio Filter.

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

On 4/14/2016 12:32 PM, Michael michael.setaazul@...
[regenrx] wrote:
>
> Is there an easy way to download all these jpg pages together,
> rather than each jpg pageseparately?
>
> Michael
>
> On 14.04.16 05:51, Rob roomberg@... [regenrx] wrote:
> > HERES YOUR BOOK:
> >
> > http://kid-power.us/book/index.html
> >
> > On 04/13/2016 07:04 PM, Brian Ford kf4tap@... [regenrx] wrote:
> >
> > That would be interesting, I would check in for that.

>

26142. Re: Top Tenning

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-14 14:11:21 UTC
From: dawmast@...
Topic: 20700 Message: 26142

I have still to test the uppermost schematic with the improved emitter follower regen. The lowermost receiver performs well. Because of the lower internal basis-collector junction capacitances by reverse-biasing these junctions the tuning range has been improved at the Medium Wave Broadcast band. The small base coupling capacitor of 20 to 40 pF ensures that the tank circuit is lightly loaded. And the benefits of separating the detector and Q-Multiplier stages is that the sensitivity is improved, because each stage has been optimized for its purpose and squegging/motorboating is avoided by the small RC time constants in the Q-Multiplier sage.

26143. Re: [regenrx] SHARED ONLINE 50 YEAR OLD OSCILLATOR BOOK

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-14 14:32:45 UTC
From: Garey Barrell
Topic: 26127 Message: 26143

Phil -

I just downloaded DTA for SeaMonkey. When I start it, it lists the 63 files, cross-hatches the
first four item bars and then stops.

What am I missing????

Thanks!

--
73, Garey - K4OAH
Rome, GA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Phil ko6bb1@... [regenrx] wrote:
> I Use a Firefox add-on called "Down Them All" all the time. It will
> allow you to download ALL the files of a specified type at once. You ca
> specify the type as "Documents", Images and so forth, or a specific type
> such as .jpg. I collect Old Time Radio shows, usually in mp3 or zip
> format and have downloaded literally thousands of files with D-T-A.
>

26144. Re: [regenrx] SHARED ONLINE 50 YEAR OLD OSCILLATOR BOOK

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-14 16:39:06 UTC
From: Rob
Topic: 26127 Message: 26144

You are all very welcome.
The response has been from many.
My goal here was to blow it up big enough to be able to read it on ANY
device, even an IPHONE,
without anything special loading like PDF or KINDLE viewer.
And when I say blow it up I mean really magnify it.
My vision is impaired and I can't read the paper book so it will go in
the mail and land on Dan's doorstep.

For those of you wanting to pull ALL images at once down to a PC.....
check back again and there will be a ZIP file at the bottom of the page.

http://kid-power.us/book/index.html

On 04/14/2016 08:49 AM, William Wood ke9xq@... [regenrx] wrote:
>
> Thanks Man
>
> I have a copy of this, but
> I downloaded it too, nice
> to be able to blow it up and
> focus on the point of interest.
> So, thanks for doing that. :)
> 73 fer now
> Bill KE9XQ
>
>
>
> On Apr 13, 2016, at 11:51 PM, Rob roomberg@...
> <mailto:roomberg@...> [regenrx] <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>> wrote:
>
>> HERES YOUR BOOK:
>> < a class="moz-txt-link-freetext"
>> href="http://kid-power.us/book/index.html" style="font-family:
>> Verdana;">http://kid-power.us/book/index.html
>>
>>
>>
>>
>> On 04/13/2016 07:04 PM, Brian Fordkf4tap@...[regenrx] wrote:
>>>
>>> That would be interesting, I would check in for that.
>>>
>

26145. Re: [regenrx] SHARED ONLINE 50 YEAR OLD OSCILLATOR BOOK

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-14 18:44:06 UTC
From: Dry Martini Holding Company☐
Topic: 26127 Message: 26145

Thank you. I am eager to (re)learn some of what I forgot from technical college. So I will be following along.

Robert
KG4KGL

> On Apr 14, 2016, at 12:39, Rob roomberg@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
> You are all very welcome.
> The response has been from many.
> My goal here was to blow it up big enough to be able to read it on ANY device, even an IPHONE,
> without anything special loading like PDF or KINDLE viewer.
> And when I say blow it up I mean really magnify it.
> My vision is impaired and I can't read the paper book so it will go in the mail and land on Dan's doorstep.
>
> For those of you wanting to pull ALL images at once down to a PC.......
> check back again and there will be a ZIP file at the bottom of the page.
>
> http://kid-power.us/book/index.html
>
>
>
>> On 04/14/2016 08:49 AM, William Wood ke9xq@... [regenrx] wrote:
>>
>> Thanks Man
>>
>> I have a copy of this, but
>> I downloaded it too, nice
>> to be able to blow it up and
>> focus on the point of interest.
>> So, thanks for doing that. :)
>> 73 fer now
>> Bill KE9XQ
>>
>>
>>
>>> On Apr 13, 2016, at 11:51 PM, Rob roomberg@... [regenrx] <regenrx@yahoogroups.com> wrote:
>>>
>>> HERES YOUR BOOK:
>>> < a class="moz-txt-link-freetext" href="http://kid-power.us/book/index.html" style="font-family: Verdana;">http://kid-power.us/book/index.html
>>>

>>>
>>>
>>>
>>>> On 04/13/2016 07:04 PM, Brian Ford kf4tap@... [regenrx] wrote:
>>>>
>>>> That would be interesting, I would check in for that.
>>>>
>
>

26146. Re: [regenrx] SHARED ONLINE 50 YEAR OLD OSCILLATOR BOOK

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-14 19:29:49 UTC
From: Tom k2bew
Topic: 26127 Message: 26146

You did a really good job too with the high resolution.
I can zoom in great on my iPad while retaining a very clear image to read.
Thanks, Tom

On Thursday, April 14, 2016, Rob roomberg@... [regenrx] <
regenrx@yahoogroups.com> wrote:

>
>
> You are all very welcome.
> The response has been from many.
> My goal here was to blow it up big enough to be able to read it on ANY
> device, even an IPHONE,
> without anything special loading like PDF or KINDLE viewer.
> And when I say blow it up I mean really magnify it.
> My vision is impaired and I can't read the paper book so it will go in the
> mail and land on Dan's doorstep.
>
> For those of you wanting to pull ALL images at once down to a PC.......
> check back again and there will be a ZIP file at the bottom of the page.
>
> http://kid-power.us/book/index.html
>
>
>
> On 04/14/2016 08:49 AM, William Wood ke9xq@...
> <javascript:_e(%7B%7D,'cvml','ke9xq@...');> [regenrx] wrote:
>
>
>
> Thanks Man
> I have a copy of this, but
> I downloaded it too, nice
> to be able to blow it up and
> focus on the point of interest.
> So, thanks for doing that. :)
> 73 fer now
> Bill KE9XQ
>
>
>
> On Apr 13, 2016, at 11:51 PM, Rob
> <javascript:_e(%7B%7D,'cvml','roomberg@...');>roomberg@...
> <javascript:_e(%7B%7D,'cvml','roomberg@...');> [regenrx] <
> regenrx@yahoogroups.com

> <javascript:_e(%7B%7D,'cvml','regenrx@yahoogroups.com');>> wrote:
>
> HERES YOUR BOOK:
> < a class="moz-txt-link-freetext" href=
> "http://kid-power.us/book/index.html"
> <http://kid-power.us/book/index.html> style="font-family: Verdana;">
> http://kid-power.us/book/index.html
>
>
>
>
> On 04/13/2016 07:04 PM, Brian Ford
> <javascript:_e(%7B%7D,'cvml','kf4tap@...');>kf4tap@...
> <javascript:_e(%7B%7D,'cvml','kf4tap@yahoo.com');> [regenrx] wrote:
>
>
>
> That would be interesting, I would check in for that.
>
>
>
>
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>

--
Sent from my iPad Gmail

26147. Some Misc Study Materials

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-14 21:31:49 UTC
From: William Wood
Topic: 26147 Message: 26147

Not a big file, but a lot of goodies here. Just delete anything that does not pique your interests…

ke9xq@...
sent you some files
‘Radio Goodies’
Download

Files (510 MB total)
MiscRadioOasillatorsandJonque.zip
RadioHandbooks1of3.zip
RadioHandbooks2of3.zip
RaDIOHANDBOOKS3OF3.zip
Receivers.zip
CrystalOscillators.zip
AudioOscillators.zip
MoreOscillators.zip
oscillators.pdf
RFOscillators.zip
Will be deleted on
21 April, 2016

26148. Rob's Book Zipped

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-14 21:34:48 UTC
From: William Wood
Topic: 26148 Message: 26148

Thanks a Million Rob
Just thought I'd save you
a few minutes and share
this with your name on it :)
Cheers
Bill

ke9xq@...
sent you some files
Download

Files (30.9 MB total)
OscillatorBook.zip
Will be deleted on
21 April, 2016

Get more out of WeTransfer, get Plus

26149. Re: [regenrx] SHARED ONLINE 50 YEAR OLD OSCILLATOR BOOK

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-14 21:58:10 UTC
From: Michael
Topic: 26127 Message: 26149

Thanks for the zip, Rob. Great download !How did you do it ?

Philand Gary, I will try D-T-A if I can find it via FF:-)

Are there any other proven options?

Michael

On 14.04.16 17:39, Rob roomberg@... [regenrx] wrote
. . . For those of you wanting to pull ALL images at once down to a PC.....
check back again and there will be a ZIP file at the bottom of
the page.
>
>
> http://kid-power.us/book/index.html
>

26150. One more book and question about old NRI course

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-14 21:58:38 UTC
From: William Wood
Topic: 26150 Message: 26150

Don’t know if you have this or not,
so just one more book for today…

While I’m here, anyone interested
in the old NRI radio course???
I bought it off ebay a year or so ago.
Be happy to send it if there is an interest.

73 fer now
Bill KE9XQ

26151. opps forgot the link

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-14 22:00:20 UTC
From: William Wood
Topic: 26151 Message: 26151

sorry for all the spam :)
Will quit for now :)
Bill

ke9xq@...
sent you some files
Download

Files (123 MB total)
arrl-1981-radio-amateur-handbook.pdf
Will be deleted on
21 April, 2016

Get more out of WeTransfer, get Plus

26152. Re: [regenrx] Some Misc Study Materials

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-14 22:39:27 UTC
From: Michael
Topic: 26147 Message: 26152

Many thanks for these goodies, William. Keep 'em coming!

Michael
UK

26153. Re: [regenrx] SHARED ONLINE 50 YEAR OLD OSCILLATOR BOOK

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-14 23:01:08 UTC
From: Gary Pewitt
Topic: 26127 Message: 26153

Look at the bottom of the page, there is a button to load them all.

On 04/14/2016 07:32 AM, Michael michael.setaazul@...
[regenrx] wrote:
>
> Is there an easy way to download all these jpg pages together,
> rather than each jpg pageseparately?
>
> Michael
>
> On 14.04.16 05:51, Rob roomberg@... [regenrx] wrote:
> > HERES YOUR BOOK:
> >
> > http://kid-power.us/book/index.html
> >
> > On 04/13/2016 07:04 PM, Brian Ford kf4tap@... [regenrx] wrote:
> >
> > That would be interesting, I would check in for that.
>
>

26154. Re: [regenrx] Some Misc Study Materials

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-14 23:33:51 UTC
From: Robert S Jenkins
Topic: 26147 Message: 26154

Tnx William.

Robert
KG4KGL

> On Apr 14, 2016, at 5:31 PM, William Wood ke9xq@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
>
>
>
>
> Not a big file, but a lot of goodies here. Just delete anything that does not pique your interests…
>
>
>
>
>
> ke9xq@... <mailto:ke9xq@...>
> sent you some files
> ‘Radio Goodies’
> <https://www.wetransfer.com/downloads/5e317944117d9bd9b1ee5899ff30ee4a20160414210552/a768795e902d430198a692610ed09bcc20160414210552/0b296a> Download <https://www.wetransfer.com/downloads/5e317944117d9bd9b1ee5899ff30ee4a20160414210552/a768795e902d430198a692610ed09bcc20160414210552/0b296a> <https://www.wetransfer.com/downloads/5e317944117d9bd9b1ee5899ff30ee4a20160414210552/a768795e902d430198a692610ed09bcc20160414210552/0b296a>
>
>
> Files (510 MB total)
> MiscRadioOasillatorsandJonque.zip
> RadioHandbooks1of3.zip
> RadioHandbooks2of3.zip
> RaDIOHANDBOOKS3OF3.zip
> Receivers.zip
> CrystalOscillators.zip
> AudioOscillators.zip
> MoreOscillators.zip
> oscillators.pdf
> RFOscillators.zip
> Will be deleted on
> 21 April, 2016
>
>
>

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>
>

26155. RE: RE: [regenrx] That good old-time AC-DC project

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-15 01:46:02 UTC
From: Hubert Miller
Topic: 26094 Message: 26155

I don’t think this list is well maintained; in fact i think it’s history. DC is gone. WIkipedia shows Arentina as 50 Hz AC and British VI is 110v 60 Hz.

One thing i have long thought strange is Japan’s system, with part of the country 50 Hz and part 60 Hz. That wouldn’t seem to make good sense,

but good sense isn’t always in good suppy. Maybe this makes it more difficult for foreigners to export electrical equipment to Japan, and thus is

protective.

My friend Brad travels overseas to teach use of the machines his company manufactures. If i recall, i think he told me about seeing in Saudi two

different AC mains sockets in the same building.

-Hue Miller

Will wrote:

> Yes 240 DC was used in Europe. I was around Southhampton, (UK) in late 60's

> and they were slowy changing over.

Yes, and a look at the "Type of current" column in the "all countries" listing at http://www.trade.gov/mas/ian/ecw/all.html is eye-opening, as some countries remain on dc feed.

Best regards,

Dave

amateur radio W9BRD

26156. Re: [regenrx] That good old-time AC-DC project

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-15 11:17:22 UTC
From: Richard
Topic: 26094 Message: 26156

Yes! Twenty years ago I was in Saudi Arabia, half the country was 50 cycle, and half 60 cycle. In one house I found a wall outlet with one socket wired for 127 volts and the other wired for 220 volts, both unmarked. They bring 220 volts three phase into houses so you have 127 volts to neutral. You have to buy lamps rated for 130 volts or they don't last long. They bought equipment from every country in the world, made to different national standards, and it was a challenge to make it all play together.

Richard, AA1P

On 04/14/2016 09:46 PM, Hubert Miller kargo_cult@... [regenrx] wrote:
>
> I don’t think this list is well maintained; in fact i think it’s
> history. DC is gone. WIkipedia shows Arentina as 50 Hz AC and British
> VI is 110v 60 Hz.
>
> One thing i have long thought strange is Japan’s system, with part of
> the country 50 Hz and part 60 Hz. That wouldn’t seem to make good sense,
>
> but good sense isn’t always in good suppy. Maybe this makes it more
> difficult for foreigners to export electrical equipment to Japan, and
> thus is
>
> protective.
>
> My friend Brad travels overseas to teach use of the machines his
> company manufactures. If i recall, i think he told me about seeing in
> Saudi two
>
> different AC mains sockets in the same building.
>
> -Hue Miller
>
> Will wrote:
>
> > Yes 240 DC was used in Europe. I was around Southhampton, (UK) in
> late 60's
>
> > and they were slowy changing over.
>
>
>
> Yes, and a look at the "Type of current" column in the "all countries"
> listing at http://www.trade.gov/mas/ian/ecw/all.html is eye-opening,

> as some countries remain on dc feed.
>
>
>
> Best regards,
>
>
>
> Dave
>
> amateur radio W9BRD
>
>
> ---
>

26157. Re: [regenrx] One more book and question about old NRI course

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-14 22:37:11 UTC
From: Ant Buz
Topic: 26150 Message: 26157

Love to see NRI course

Anthony Buzak
56 Dexter St.
Tonawanda, NY 14150
716-693-1749

ant.buz@...

www.anthonybuzak.com

On Thu, Apr 14, 2016 at 5:58 PM, William Wood ke9xq@... [regenrx] <
regenrx@yahoogroups.com> wrote:

> Don’t know if you have this or not,
> so just one more book for today…
>
> While I’m here, anyone interested
> in the old NRI radio course???
> I bought it off ebay a year or so ago.
> Be happy to send it if there is an interest.
>
> 73 fer now
> Bill KE9XQ
>
> ------------------------------------
>
> ------------------------------------
>
> "In the interest of Regenerating radio's lost art of Regeneration"
> ------------------------------------
>
> Yahoo Groups Links
>
>
>
>

26158. Some old NRI courses

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-15 15:08:26 UTC
From: William Wood
Topic: 26158 Message: 26158

Greetings Folks
At the risk of our moderator’s patience growing thin,
I will send only two more files for the near foreseeable
future. This one and one more shortly to come to past.
The context of these files will teach us all the regeneration
parts of those radios :) So, not totally off topic :)
Hope it is worth your time otherwise sorry for all the spam.
This was sent by request too, so:
Thanks for everyone’s patience, and
73 fer now
Bill KE9XQ

ke9xq@...
sent you some files
Download

Files (153 MB total)
NRI1of3.zip
NRI2of3.zip
NRI3of3.zip
Will be deleted on
22 April, 2016

Get more out of WeTransfer, get Plus

26159. OK last course for now an old RCA course

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-15 15:38:48 UTC
From: William Wood
Topic: 26159 Message: 26159

OK guys I've been spamming your mail boxes for
long enough, think I will go and lay by my bowl.
Just hope it finds at least one good home.
Thanks for everyone's patience…
73 fer now
Bill KE9XQ

ke9xq@charter.net
sent you some files
Download

Files (1.01 GB total)
RCACourse.zip
Will be deleted on
22 April, 2016

Get more out of WeTransfer, get Plus

26160. Re: [regenrx] OK last course for now an old RCA course

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-15 17:00:48 UTC
From: Rob
Topic: 26159 Message: 26160

WOW Thank you. What year vintage is this RAC course?

1 GIGAbyte.
downloading now...says it will download for the next 2 hours.

On 04/15/2016 11:38 AM, William Wood ke9xq@... [regenrx] wrote:
>
> OK guys I've been spamming your mail boxes for
>
> long enough, think I will go and lay by my bowl.
> Just hope it finds at least one good home.
> Thanks for everyone's patience…
> 73 fer now
> Bill KE9XQ
>
>
>
>
>
>
> ke9xq@... <mailto:ke9xq@...>
> sent you some files
> <https://www.wetransfer.com/downloads/2850f09378c6aac326f2424a23628fc020160415144632/47fb6f042384a2b5e2b66b783da3890a20160415144632/cc3492>
> Download
> <https://www.wetransfer.com/downloads/2850f09378c6aac326f2424a23628fc020160415144632/47fb6f042384a2b5e2b66b783da3890a20160415144632/cc3492>
> <https://www.wetransfer.com/downloads/2850f09378c6aac326f2424a23628fc020160415144632/47fb6f042384a2b5e2b66b783da3890a20160415144632/cc3492>
>
>
>
>
>
> Files (1.01 GB total)
> RCACourse.zip
> Will be deleted on
> 22 April, 2016
>
>
> Get more out of WeTransfer, get Plus
> <https://www.wetransfer.com/plus?trk=email-recipient_download>
>
>
>

26161. Re: [regenrx] OK last course for now an old RCA course

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-15 18:09:23 UTC
From: Michael
Topic: 26159 Message: 26161

Brilliant stuff, Bill !

In them there days, many authors had a mastery
of language and the ability to impart understanding
of basic principlesthat Multitube etc just don't match.
And many of the illustrations were clearer, too.

When you feel brave again, moderator volentis, send us more!

Michael

On 15.04.16 16:38, William Wood ke9xq@... [regenrx] wrote:
>
> OK guys I?ve been spamming your mail boxes for
>
> long enough, think I will go and lay by my bowl.
> Just hope it finds at least one good home.
> Thanks for everyone?s patience?
> 73 fer now
> Bill KE9XQ
>

26162. Re: [regenrx] That good old-time AC-DC project

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-16 02:42:06 UTC
From: Sam Neal
Topic: 26094 Message: 26162

Hello,

Just some useless information - Houston Lighting and Power Company shut down their last DC generator in 1979 and removed all of the very large copper " wires " to prevent theft. At the time they shut down the DC gererator(s) they had 11 DC customers, all old style elevators in the older downtown buildings.

73,

Sam Neal N5AF

The "dc" capability was for more than just battery supply. Some pretty large sections of major cities had 120 V _dc_ mains (a side-effect of dc supply for streetcars/subways), even until relatively recently. In New York City, for instance, Consolidated Edison switched its last dc customer over to ac in _2007_ per this press release:

26163. Re: That good old-time AC-DC project

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-16 11:25:40 UTC
From: Bry Carling
Topic: 26094 Message: 26163

Yes indeed,

240V DC was used in UK as well as in Europe. As a lad my father told me about having i in school in the 19430s - 1940s.

It seems they wired up a hand rail in one of the classroom sand the teacher had great dificulty letting go. But that was legend, I don't think anyone was injured, died or permanently harmed.

Bry AF4K
. Re: That good old-time AC-DC project
Posted by: david.newkirk@... davidpnewkirk
Date: Thu Apr 14, 2016 3:12 am ((PDT))

Will wrote:

> Yes 240 DC was used in Europe. I was around Southhampton, (UK) in late 60's

> and they were slowy changing over.

26164. Re: [regenrx] Re: That good old-time AC-DC project

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-16 11:51:49 UTC
From: Robert Matthias
Topic: 26094 Message: 26164

DC mains power was also used in Australia. In Sydney, dynamotors were provided in at Town Hall and Lang Park to supply direct current to customers. Alternating current was adopted as the new standard from 1930, although the first AC substation did not come into use until 1935. The AC system was not completed until c. 1958. No new DC customers were accepted after 1935, but the existing supply continued, albeit with mercury-arc rectifiers in later years, until 1985.

Bob VK2RL

On 16/04/2016 9:25 PM, Bry Carling af4k@... [regenrx] wrote:
>
> Yes indeed,
>
> 240V DC was used in UK as well as in Europe. As a lad my father told
> me about having i in school in the 19430s - 1940s.
>
> It seems they wired up a hand rail in one of the classroom sand the
> teacher had great dificulty letting go. But that was legend, I don't
> think anyone was injured, died or permanently harmed.
>
> Bry AF4K
>
> . Re: That good old-time AC-DC project
> Posted by: david.newkirk@... davidpnewkirk
> Date: Thu Apr 14, 2016 3:12 am ((PDT))
>
> Will wrote:
>
>
>
> > Yes 240 DC was used in Europe. I was around Southhampton, (UK) in late 60's
>
> > and they were slowy changing over.
>
>

26165. Oscillator Discussions OR Regen Discussions???

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-16 18:49:23 UTC
From: William Wood
Topic: 26165 Message: 26165

Greetings Folks
I did not see a book yet that would be a good one
to focus on as the oscillator book was. But have to
admit that I have not looked very hard either :) Do
you know of a good book to tackle?
Was just wondering if those that had a chance
wanted to tackle one chapter at a time and discuss
the ins and outs, maybe share a schematic or two
and debate the qualities or shortcomings of a particular
circuit? I think the book that we have and or shared,
is a great little book, or we can do a different one.
I only saw two or three people that gave me the idea
they would not mind running with the thought. If there
is not enough interest, we can just do it ourselves, and
ask the gurus on board for further info if need be. Only
thinking of this as a time framed goal that would make
us do the study, as to my habit of letting it sit on the
shelf and only looking for it if I had a question :)
Only asking if there is actual interest, and which way
those interested would like to go with it. ???
73 fer now
Bill KE9XQ

26166. Reminiscing, my 8th Grade Science Fair Project

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-16 20:12:57 UTC
From: Phil
Topic: 26166 Message: 26166

Hi All,
WAY-WAY back when I was just a young sprout, I wasn't sure what I wanted to enter in the "Science Fair" (don't remember if that was the 'official' name or not).

Well, just about everybody knew that I really had only one interest in life (and they weren't girls at that time ;-) In fact, I had trouble keeping interested in most of the classes, though I managed to keep from bringing home any D's or F's (I'd have had a 'Parental Conference' if I had).

The science teacher suggested that I bring something "radio" and demonstrate/explain how it worked.

One of the things I thought of was taking my Signal Generator (think it was an Eico), a small AA5 receiver, mic and pre-amp and use it all as a mini broadcaster. But that was a lot to lug to school on a bicycle, and I didn't think it would be a good demo.

Then I looked at a box of parts that I'd scrounged from some junked out radios, mostly AA5's. When I parted out something (and I had a good source in the local TV/Radio shops), I saved EVERYTHING usable, including old resistors, capacitors, tube sockets etc.

Eureka!! I'll build an AA5 (All American 5) receiver. Only problem, funds were about non-existent, as was a suitable chassis (the one thing I didn't keep from parted out sets were the chassis and cabinet (if it had one). Besides, it would be hard to make a suitable display that way, it might look like I'd just pulled a radio out of it's cabinet and not put any effort into it.

Then an old magazine article extolling the virtues of "breadboarding" projects lit up a lightbulb in my head. I needed a breadboard, and I knew just where to find one.

Doing a couple uncalled for chores around the house followed by sweet-talking mom and I was the proud owner of one of her kitchen breadboards (think she was happy to be able to buy a new one anyway ;-) It wasn't pretty, but it was functional.

Taking my prize to the garage (which was my bedroom & shop) I gathered up all the needed parts, tube sockets, tubes, IF cans, output Xformer, tuning cap, speaker and so forth.

I think the only thing I bought was a Ferrite 'loopstick' for the antenna. Anybody here remember those? They were a small adjustable antenna coil with a short wire on it to act as the antenna. They were

often touted as a universal replacement for damaged loop antennas. The board was too small for the large loop antennas that typically resided in the back of old sets.

After the donkey work was completed the real job began, laying out the entire collection of 'scrounged junque' in the order of signal flow. I don't recall how long it took to assemble all of it, probably about a week as I was a very experienced builder by then. . .

The first time I plugged it in I stood back as I wasn't really sure what that Frankenstein Monster would do when hit with 110VAC!

SURPRISE, it worked! Only problem is, with no natural chassis shielding etc it also oscillated to beat the band. Whistles and squawks like you wouldn't believe. But with some careful tweaking and rerouting of some wires I got it tamed down and it actually played music.

I then made up little paper labels briefly naming each stage, then borrowed mom's typewriter and made up a "poop sheet" describing what each stage did.

A couple days or so before the science fair the teacher asked me how it was coming. I described it to her and she asked to see it. When she saw it she was HORRIFIED that I intended to plug that thing in and display it!!! Said if I wanted to enter it AND power it up I had to put a safety cover over it (this fits in with a recent discussion we had here on AC/DC power)!

To this day I have NO idea where dad got it, but he pulled a magic act and brought me a piece of clear plexiglass (or whatever the clear plastic of that time was) cut to the proper size to fit over it. A couple pieces of wood to cover the front and ends held the cover in place.

I think that was the ONLY time I ever got an "A+" on ANYTHING in school, lol.

--
73 From "The Beaconeer's Lair"
Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)

HF/LF RADIOS:
Grundigs: S-350 (~2006), G6 (2011) & S450DLX (2014).
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
Icom: IC-735 Transceiver (~1990).
Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
Icom: IC-7200 Transceiver (~2015).
R-Shack: DX-380 digital portable (~1990).
SDR: Softrock Ensemble II LF (built from a kit 2015).
Zenith: Royal-7000 Transoceanic Portable (~1968).

ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 4 Port Multicoupler, Feeds Antenna to 4 RX's.

HOMEBREW 8 Hz Audio Filter.
Timewave DSP-599zx Audio Filter.
Behringer 1202fx Audio Mixer (for mixing/routing audio).

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

26167. Re: [regenrx] 8th Grade Science Fair Project

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-16 20:54:23 UTC
From: Michael
Topic: 26166 Message: 26167

Insert ± a few decadesof time-warp and you could win/ have won
America'a got Talent, Phil :-)

PS : Hope you proudly removed the casing again after the event !

MIchael

On 16.04.16 21:12, Phil ko6bb1@... [regenrx] wrote:

I think that was the ONLY time I ever got an "A+" on ANYTHING in
school, lol.

Phil, KO6BB

26168. Re: [regenrx] Oscillator Discussions OR Regen Discussions???

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-16 23:04:12 UTC
From: Rob
Topic: 26165 Message: 26168

I am the student here... not the teacher.

On 04/16/2016 02:49 PM, William Wood ke9xq@... [regenrx] wrote:
>
> Greetings Folks
> I did not see a book yet that would be a good one
> to focus on as the oscillator book was. But have to
> admit that I have not looked very hard either :) Do
> you know of a good book to tackle?
> Was just wondering if those that had a chance
> wanted to tackle one chapter at a time and discuss
> the ins and outs, maybe share a schematic or two
> and debate the qualities or shortcomings of a particular
> circuit? I think the book that we have and or shared,
> is a great little book, or we can do a different one.
> I only saw two or three people that gave me the idea
> they would not mind running with the thought. If there
> is not enough interest, we can just do it ourselves, and
> ask the gurus on board for further info if need be. Only
> thinking of this as a time framed goal that would make
> us do the study, as to my habit of letting it sit on the
> shelf and only looking for it if I had a question :)
> Only asking if there is actual interest, and which way
> those interested would like to go with it. ???
> 73 fer now
> Bill KE9XQ
>
>

26169. Re: Lower noise, reduced pulling and frequency shift with BJT detector

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-17 21:07:29 UTC
From: dawmast@...
Topic: 10866 Message: 26169

A high coupling capacitor between a tank circuit and a regenerative detector can also introduce squegging/motorboating due to the large RC time constant with the coupling capacitor and the base bias resistor network. Best practice is keeping this coupling capacitor between tank circuit and base of the regenerative stage low and connect a separate detector onto the tank circuit. BJT detector onto a low-Z tap or a link coil.

26170. B&W MEL coils wanted

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-17 21:15:04 UTC
From: Hubert Miller
Topic: 26170 Message: 26170

I am looking for these B&W plugin coils: 20 MEL, 10 MEL

I bought what looks like the “Novice Pair” from the “How To Become” ARRL booklet of the late 1950s.
I wasn’t up to the metalwork, hi.

(Seems to me the more basic 3V4 receiver and slat-board transmitter of the 1953 edition was a lot more do-able

for young people.)

tnx

Hue Miller

26171. re "Novice Pair" receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-17 21:21:34 UTC
From: Hubert Miller
Topic: 26171 Message: 26171

Now re the ARRL's 'Novice pair receiver' in the late 1950s ARRL booklet "How To Become a Radio Amateur",

i note:

The tube choice, 2x 6AQ5, seems kind of odd to me. I'd think the detector would more likely be a 6AU6 or 6BA6,

rather than a power tube. And the output tube wouldn't really need to be that large either, something like a

6AK6 would be fine.

There is NO volume or gain control, only regen control. Not so good.

The coils are low-inductance for the bands chosen - that is, the tuned circuit, for stability, is intended to be high-C.

Even so, the text says the receiver will probably not be useful above 40 meters (7 MHz) band. (They mean not

useful, for CW reception, because of stability, on the upper Novice band of 21 MHz.) The top coil tho, does tune up

to something like 30 MHz.

-Hue Miller

26172. Re: [regenrx] B&W MEL coils wanted

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-17 22:12:12 UTC
From: Bill Houghton
Topic: 26170 Message: 26172

Are those small coils that look a lot like the Gonset coils?
73,
Bill, WA6NEQ

From: "Hubert Miller kargo_cult@... [regenrx]" <regenrx@yahoogroups.com>
To: regenrx@yahoogroups.com
Sent: Sunday, April 17, 2016 2:15 PM
Subject: [regenrx] B&W MEL coils wanted

I am looking for these B&W plugin coils: 20 MEL, 10 MELI bought what looks like the “Novice Pair” from the “How To Become” ARRL booklet of the late 1950s.
I wasn’t up to the metalwork, hi. (Seems to me the more basic 3V4 receiver and slat-board transmitter of the 1953 edition was a lot more do-able for young people.)tnx Hue Miller

26173. RE: [regenrx] B&W MEL coils wanted

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-17 22:14:02 UTC
From: Hubert Miller
Topic: 26170 Message: 26173

They are horizontal, air core coils, i think about 1 inch diameter, on a ceramic

plug-in base with 5 pins.

-Hue

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Sunday, April 17, 2016 3:12 PM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] B&W MEL coils wanted

Are those small coils that look a lot like the Gonset coils?

73,

Bill, WA6NEQ

From: "Hubert Miller kargo_cult@... <mailto:kargo_cult@...> [regenrx]"
<regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com> >
To: regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>
Sent: Sunday, April 17, 2016 2:15 PM
Subject: [regenrx] B&W MEL coils wanted

I am looking for these B&W plugin coils: 20 MEL, 10 MEL

I bought what looks like the “Novice Pair” from the “How To Become” ARRL booklet of the late 1950s.
I wasn’t up to the metalwork, hi.

(Seems to me the more basic 3V4 receiver and slat-board transmitter of the 1953 edition was a lot more do-able

for young people.)

tnx

Hue Miller

26174. Discussion group

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-17 23:05:48 UTC
From: William Wood
Topic: 26174 Message: 26174

Hey Rob
It looks like you are the only one
interested in further discussion of
those oscillators. I’m interested of
course but we can just read that book,
and ask questions to the group at large
and get the study done, but we’ll just
roll with the flow. Very glad you were
able to be interested and get all the books
and such via those file transfers…
73 fer now
Bill KE9XQ

26175. Re: re "Novice Pair" receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-18 00:06:34 UTC
From: david.newkirk@...
Topic: 26171 Message: 26175

Hue wrote:

> Now re the ARRL's 'Novice pair receiver' in the late 1950s ARRL booklet
> "How To Become a Radio Amateur", I note: The tube choice, 2x 6AQ5, seems kind of odd to me.
> I'd think the detector would more likely be a 6AU6 or 6BA6,
> rather than a power tube. And the output tube wouldn't really need to be that large either,
> something like a 6AK6 would be fine.

Do read the original QST article, wherein the author discusses why he used 6AQ5s. Tubes of the classes you're describing were evaluated. Every additional complication would have lost more readers and more potential builders, including the addition of an AF GAIN control. The target audience was high-school kids on tight budgets. On the other hand, prefab coils--B&W transmitting coils--were used because doing so end-ran the entire "I can't wind the coils" problem.

> The coils are low-inductance for the bands chosen – that is, the tuned circuit, for stability,
> is intended to be high-C. Even so, the text says the receiver will probably not be useful above
> 40 meters (7 MHz) band. (They mean not useful, for CW reception, because of stability,
> on the upper Novice band of 21 MHz.) The top coil tho, does tune up to something like 30 MHz.

Yes, the receiver would not have been very stable at 21 MHz. (As the "Novice Special"--which is what its author, Don Mix, W1TS, called it--was intended for, er Novices, how it might have behaved at frequencies other than 3.5, 7, and 21 MHz was secondary.) And, as he acknowledged, its performance at 15 meters would have been poor. But so would have been the performance of the cheap superhets that Novices were buying that covered that relatively new ham band. (In fact, _most_ two-dial general-coverage receivers, even those of medium to good pedigree, right up until the era of two-dial superhets ended, are and were pretty poor performers up there.) Which is why, instead of wasting time and effort trying to make the set work well at 15 meters--it could not have--in a subsequent issue of QST he described a 6AN8-based band-imaging converter that used a 17.7-MHz crystal to bring 20-, 15-, and 10-meter signals to ranges between 3300 and 3700 kHz and 10 to 11 MHz.

Mix explained his chose of 17.7 MHz as follows: "An oscillator frequency of 17,700 kc. was chosen for two reasons. First, it puts the center frequencies of both bands [20 and 15 meters] at the same point on the receiver dial, making it unnecessary to shift the band-set capacitor when changing bands. Second, the low-frequency limit of the regenerative receiver's tuning range with the 80-meter coil is about 3200 kc. Other oscillator frequencies would move one band or another closer to or beyond this limit."

A few more aspects are worth noting. For one thing, adding a crystal-control converter head of the receiver makes it a Regenerodyne. Second, Mix notes that sometimes the 6AN8 pentode

mixer can be made to oscillate at particular input-tuned-circuit tunings when no antenna is connected. As I describe in my page at http://dpnwritings.nfshost.com/ej/hybrid_mixer/ http://dpnwritings.nfshost.com/ej/hybrid_mixer/ , we now know that the reason this happens is that feeding the crystal-oscillator signal to the 6AN8 mixer cathode in the manner described by Mix makes the mixer regenerative by means of Colpitts-capacitive-divider action.

Finally, in this forum in the past considerable hand-wringing has been devoted to the somewhat over-the-top mechanical construction (and the templates for same) of the Novice Special and its related converter. I agree that the construction method used was overkill then and now, but I think also that we can excuse Mix for this elaboration for two reasons: (1) Staff-constructed articles in QST were as much about window dressing and doing a classy job as getting something that merely worked. It wouldn't have done for the ARRL Lab to turn out hammy junk built into cookie tins, and we know the set went on to be included in _How to Become a Radio Amateur_. (2) The tendency to provide over-elaborate instructions and templates came naturally to Mix by this time, as he was single-handedly manning ARRL HQ's Technical Information Service, which among many other things had to support readers' efforts to build and succeed with circuits, especially staff-produced circuits, published in QST, the ARRL Handbook, and other League publications. So it is that we can see Mix provide a similar over-the-top, templates-and-all treatment to the 6C4-5763 Boosted Pierce "Novice" transmitter he published in October 1968.

Best regards,

Dave
amateur radio W9BRD
ARRL HQ 1974-1977 and 1985-1996
radio pages: http://dpnwritings.nfshost.com/ej/ http://dpnwritings.nfshost.com/ej/

26176. Re: [regenrx] Discussion group

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-18 01:12:15 UTC
From: Brian Ford
Topic: 26174 Message: 26176

blockquote, div.yahoo_quoted { margin-left: 0 !important; border-left:1px #715FFA solid !important; padding-left:1ex !important; background-color:white !important; } I'm interested, mowing season has kicked in early and we are busy servicing mowers and other equipment.
Keith

Sent from Yahoo Mail for iPad

On Sunday, April 17, 2016, 18:05, William Wood ke9xq@... [regenrx] <regenrx@yahoogroups.com> wrote:

Hey Rob
  It looks like you are the only one
interested in further discussion of
those oscillators. I’m interested of
course but we can just read that book,
and ask questions to the group at large
and get the study done, but we’ll just
roll with the flow. Very glad you were
able to be interested and get all the books
and such via those file transfers…
73 fer now
Bill KE9XQ

"In the interest of Regenerating radio's lost art of Regeneration"

Yahoo Groups Links

26177. Discussion Group once again

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-18 02:27:54 UTC
From: William Wood
Topic: 26177 Message: 26177

OK, I guess three is a good even number :) I know if we
start something others will chime in. They would have had
we not named and focused too, and we'll be happy about that :)

While we are waiting for someone that could teach the subject,
if no one says they would do it I would be willing to coordinate.
If everyone wants to do so, let's read the first chapter this week
and start our discussion Next Saturday. And, if all goes well, we
can discuss chapter one the following week unless you have a
point of interest you'd like to bring up right away. Then each week,
we read ahead the next chapter, while we are talking about the
chapter we have read before.

What I am thinking here is that you have a whole week to learn,
study or compare before we start the discussion, and then while
we are talking about that chapter you are starting to prepare for
the following week. During that week of contemplating the subject
at hand, if you can find similar schematics or ideas from the Internet
archives,you can share at your leasure.

If anyone does not have that Oscillator book we can make sure you
have a copy. There are only ten chapters in this book, if you'd like
to continue the subject, we can do the bigger book just shared right
after the smaller book. This will bring to mind much of what we'd
just talked about but it could help make things sink in a little better.
Only if the interest survives :) The Bigger book goes into a LOT
more detail :)

73 fer now Folks
Bill KE9XQ
PS our thanks to our moderator for the patience :)

26178. Re: [regenrx] Discussion Group once again

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-18 02:57:54 UTC
From: Robert S Jenkins
Topic: 26177 Message: 26178

Hello,

Just to be clear, we are using the Sam’s oscillator circuits book, right?

Thank you,

Robert
KG4KGL

> On Apr 17, 2016, at 10:27 PM, William Wood ke9xq@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
> OK, I guess three is a good even number :) I know if we
> start something others will chime in. They would have had
> we not named and focused too, and we’ll be happy about that :)
>
> While we are waiting for someone that could teach the subject,
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> If everyone wants to do so, let’s read the first chapter this week
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> point of interest you’d like to bring up right away. Then each week,
> we read ahead the next chapter, while we are talking about the
> chapter we have read before.
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> we are talking about that chapter you are starting to prepare for
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> at hand, if you can find similar schematics or ideas from the Internet
> archives,you can share at your leasure.
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> Only if the interest survives :) The Bigger book goes into a LOT
> more detail :)
>
> 73 fer now Folks
> Bill KE9XQ
> PS our thanks to our moderator for the patience :)
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> "In the interest of Regenerating radio's lost art of Regeneration"
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> Yahoo Groups Links
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26179. Re: [regenrx] Discussion Group once again

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-18 03:04:40 UTC
From: Rob
Topic: 26177 Message: 26179

I'm game for anything here.
The Oscillators book was a great way to start poking into HOW to have
technical discussions based on a book.
If anyone wants to do a different book thats fine by me.

Just a note about online reading verses paper book print
check out the screen verses paper font size in this image:
http://www.learnmorsecode.com/regen/HPstream.jpg

You said two books....more detail in the Bigger book

What is the name of The Bigger book ? I seemed to have missed that in
all these downloads.

On 04/17/2016 10:27 PM, William Wood ke9xq@... [regenrx] wrote:
> OK, I guess three is a good even number :) I know if we
> start something others will chime in. They would have had
> we not named and focused too, and we?ll be happy about that :)
>
> While we are waiting for someone that could teach the subject,
> if no one says they would do it I would be willing to coordinate.
> If everyone wants to do so, let?s read the first chapter this week
> and start our discussion Next Saturday. And, if all goes well, we
> can discuss chapter one the following week unless you have a
> point of interest you?d like to bring up right away. Then each week,
> we read ahead the next chapter, while we are talking about the
> chapter we have read before.
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> What I am thinking here is that you have a whole week to learn,
> study or compare before we start the discussion, and then while
> we are talking about that chapter you are starting to prepare for
> the following week. During that week of contemplating the subject
> at hand, if you can find similar schematics or ideas from the Internet
> archives,you can share at your leasure.
>
> If anyone does not have that Oscillator book we can make sure you
> have a copy. There are only ten chapters in this book, if you?d like
> to continue the subject, we can do the bigger book just shared right
> after the smaller book. This will bring to mind much of what we?d
> just talked about but it could help make things sink in a little better.
> Only if the interest survives :) The Bigger book goes into a LOT
> more detail :)
>
> 73 fer now Folks
> Bill KE9XQ
> PS our thanks to our moderator for the patience :)

>

26180. Re: [regenrx] Discussion Group once again

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-18 03:33:36 UTC
From: William Wood
Topic: 26177 Message: 26180

Yes the Sams Book on Oscillators.
The second book is on Oscillators too
but I can’t remember it’s name right now.
Sounds like it’s a go folks :)
Cheers
Bill

On Apr 17, 2016, at 10:04 PM, Rob roomberg@... [regenrx] <regenrx@yahoogroups.com> wrote:

> I'm game for anything here.
> The Oscillators book was a great way to start poking into HOW to have
> technical discussions based on a book.
> If anyone wants to do a different book thats fine by me.
>
>
> Just a note about online reading verses paper book print
> check out the screen verses paper font size in this image:
> http://www.learnmorsecode.com/regen/HPstream.jpg
>
> You said two books....more detail in the Bigger book
>
> What is the name of The Bigger book ? I seemed to have missed that in
> all these downloads.
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> On 04/17/2016 10:27 PM, William Wood ke9xq@... [regenrx] wrote:
>> OK, I guess three is a good even number :) I know if we
>> start something others will chime in. They would have had
>> we not named and focused too, and we’ll be happy about that :)
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>> While we are waiting for someone that could teach the subject,
>> if no one says they would do it I would be willing to coordinate.
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>> and start our discussion Next Saturday. And, if all goes well, we
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>> point of interest you’d like to bring up right away. Then each week,
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>> we are talking about that chapter you are starting to prepare for
>> the following week. During that week of contemplating the subject
>> at hand, if you can find similar schematics or ideas from the Internet
>> archives,you can share at your leasure.
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>> If anyone does not have that Oscillator book we can make sure you
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>> 73 fer now Folks
>> Bill KE9XQ
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26181. Re: [regenrx] Discussion Group once again

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-18 04:17:12 UTC
From: Rob
Topic: 26177 Message: 26181

Big book... I think it was this 491 page book:
http://www.tubebooks.org/Books/reich_1961_functional-circuits-and-oscillators.pdf

I don't think we have the patience for this 491 page book.

On 04/17/2016 11:33 PM, William Wood ke9xq@... [regenrx] wrote:
> Yes the Sams Book on Oscillators.
> The second book is on Oscillators too
> but I can?t remember it?s name right now.
> Sounds like it?s a go folks :)
> Cheers
> Bill
>
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>
> On Apr 17, 2016, at 10:04 PM, Rob roomberg@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
>> I'm game for anything here.
>> The Oscillators book was a great way to start poking into HOW to have
>> technical discussions based on a book.
>> If anyone wants to do a different book thats fine by me.
>>
>>
>> Just a note about online reading verses paper book print
>> check out the screen verses paper font size in this image:
>> http://www.learnmorsecode.com/regen/HPstream.jpg
>>
>> You said two books....more detail in the Bigger book
>>
>> What is the name of The Bigger book ? I seemed to have missed that in
>> all these downloads.
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>> On 04/17/2016 10:27 PM, William Wood ke9xq@... [regenrx] wrote:

>>> OK, I guess three is a good even number :) I know if we
>>> start something others will chime in. They would have had
>>> we not named and focused too, and we?ll be happy about that :)
>>>
>>> While we are waiting for someone that could teach the subject,
>>> if no one says they would do it I would be willing to coordinate.
>>> If everyone wants to do so, let?s read the first chapter this week
>>> and start our discussion Next Saturday. And, if all goes well, we
>>> can discuss chapter one the following week unless you have a
>>> point of interest you?d like to bring up right away. Then each week,
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>>> chapter we have read before.
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>>> What I am thinking here is that you have a whole week to learn,
>>> study or compare before we start the discussion, and then while
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>>> at hand, if you can find similar schematics or ideas from the Internet
>>> archives,you can share at your leasure.
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>>> If anyone does not have that Oscillator book we can make sure you
>>> have a copy. There are only ten chapters in this book, if you?d like
>>> to continue the subject, we can do the bigger book just shared right
>>> after the smaller book. This will bring to mind much of what we?d
>>> just talked about but it could help make things sink in a little better.
>>> Only if the interest survives :) The Bigger book goes into a LOT
>>> more detail :)
>>>
>>> 73 fer now Folks
>>> Bill KE9XQ
>>> PS our thanks to our moderator for the patience :)
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26182. Re: [regenrx] Discussion Group once again

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-18 04:20:56 UTC
From: Rob
Topic: 26177 Message: 26182

Yes
this book:
http://kid-power.us/book/index.html
http://kid-power.us/book/index2.html

On 04/17/2016 10:57 PM, Robert S Jenkins qrp@... [regenrx] wrote:
> Hello,
>
>
> Just to be clear, we are using the Sam?s oscillator circuits book, right?
>
> Thank you,
>
> Robert
> KG4KGL
>
>
>> On Apr 17, 2016, at 10:27 PM, William Wood ke9xq@... [regenrx] <regenrx@yahoogroups.com>
wrote:
>>
>> OK, I guess three is a good even number :) I know if we
>> start something others will chime in. They would have had
>> we not named and focused too, and we?ll be happy about that :)
>>
>> While we are waiting for someone that could teach the subject,
>> if no one says they would do it I would be willing to coordinate.
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>> the following week. During that week of contemplating the subject
>> at hand, if you can find similar schematics or ideas from the Internet
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>> If anyone does not have that Oscillator book we can make sure you
>> have a copy. There are only ten chapters in this book, if you?d like
>> to continue the subject, we can do the bigger book just shared right
>> after the smaller book. This will bring to mind much of what we?d
>> just talked about but it could help make things sink in a little better.

>> Only if the interest survives :) The Bigger book goes into a LOT
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>> Bill KE9XQ
>> PS our thanks to our moderator for the patience :)
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26183. Re: [regenrx] re "Novice Pair" receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-18 12:52:50 UTC
From: Brian Ford
Topic: 26171 Message: 26183

blockquote, div.yahoo_quoted { margin-left: 0 !important; border-left:1px #715FFA solid !important; padding-left:1ex !important; background-color:white !important; } Cool, I've looked for a copy of that for years!
Keith

Sent from Yahoo Mail for iPad

On Sunday, April 17, 2016, 16:21, Hubert Miller kargo_cult@... [regenrx] <regenrx@yahoogroups.com> wrote:

Now re the ARRL's 'Novice pair receiver' in the late 1950s ARRL booklet "How To Become a Radio Amateur",

i note:

The tube choice, 2x 6AQ5, seems kind of odd to me. I'd think the detector would more likely be a 6AU6 or 6BA6,

rather than a power tube. And the output tube wouldn't really need to be that large either, something like a

6AK6 would be fine.

There is NO volume or gain control, only regen control. Not so good.

The coils are low-inductance for the bands chosen – that is, the tuned circuit, for stability, is intended to be high-C.

Even so, the text says the receiver will probably not be useful above 40 meters (7 MHz) band. (They mean not

useful, for CW reception, because of stability, on the upper Novice band of 21 MHz.) The top coil tho, does tune up

to something like 30 MHz.

-Hue Miller

26184. RE: [Glowbugs] re "Novice Pair" receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-18 15:44:57 UTC
From: Hubert Miller
Topic: 26184 Message: 26184

The booklet text says the receiver will be not so useful for CW on the higher bands, but still good for AM signals there and

will work a speaker on many signals. That means there’s a lot of audio, as you’d expect from a 6AQ5. Imagining using

headphones with this receiver makes my ears hurt. Yes, many simple regens depended on retarding the regen control

as a sensitivity hence output control, but that also lowers the selectivity, which kind of limits DXability on crowded

bands. The example i have is a faithful copy of the ARRL booklet model and of course i’ll not modify it in any way.

It will be fun to try it out and see just how practical it is to use.

Howard Pyle W7OE in his book “Building Your Amateur Radio Novice Station” actually had a more mechanically and

electrically practical receiver project with the 6EB8 single tube receiver. He dispensed with the vernier drive that the

QST project uses, and used the 2 capacitor tuning system. It does have a volume control, and (he said) it is usable

thru 15 meters. Unfortunately his project receiver and transmitter are a mechanically maximum way to build an

minimalist station. 100 pages of cutting and drilling templates and wiring and assembling subassemblies. What Novice

would look at ham radio as a fun activity if it looks like a 6-month project in metalwork first? This is the absolute

worst Novice how-to book ever. Not only that, but nowhere in the text is the actual tuning range of the receiver’s

3 bands given. The transmitter is a single 6DQ6 but get this, it’s powered by a voltage doubler from a 450 volt

transformer. The key-up voltage is going to be around 1000 volts. Isn’t that fun, boys and girls? He apparently

did this to try to get near the max 75 watt limit, running ~900 volts at 80 mA.
I don’t have ARRL membership at this time. But i wonder if QST reviewed this book and savaged it as it should have

been savaged.

-Hue

.

26185. WTB Amplifier book

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-18 20:07:43 UTC
From: William Wood
Topic: 26185 Message: 26185

Greetings Everyone
There is a very similar book to
the one we are studying in the Sams
series, called Amplifier Circuits with
the color flow charts and such. I would
like to beg, borrow or buy this book.
I do see one on ebay for $15, but I'm
such a cheap skate that it would hurt the
pocketbook to do so :) If I could borrow
a copy that would be great. Be happy to
pay postage both ways. Please let me
know if you have one and are willing to
do one or the other of my requests :)
73 fer now
Bill KE9XQ
PS hope to be in town shortly, will see
if the library has a copy, I'm sure they do
not, but the interlibrary loaning system
might bring one up…

26186. Re: Fwd: REGENERODYNE RECEIVER

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-18 20:32:13 UTC
From: dawmast@...
Topic: 26056 Message: 26186

Has anyone a schematic diagram of this interesting KRC-2 receiver?

26187. IS this a choke and a transformer or is this one transformer made of 3 coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-19 03:17:50 UTC
From: Rob
Topic: 26187 Message: 26187

IS this a choke and a transformer or is this one transformer made of 3 coils?

I found this GENERAL MOTORS Day-Fan 5077 radio circuit with a set of 3 coils
see picture:
http://www.learnmorsecode.com/regen/gm/GM1.jpg

whole schematic:
http://www.learnmorsecode.com/regen/gm/GM2.jpg

Can anyone tell me what the 3 coil symbols are for and why the middle coil is NOT
connected to the plates.... they are connected to the grids of the preceding stage in the
first four 226 tubes.

26188. Re: [regenrx] IS this a choke and a transformer or is this one transformer made of 3 coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-19 04:17:19 UTC
From: Russ Williams
Topic: 26187 Message: 26188

They are not shown how you expect air-core transformers to be drawn. Compare these to the iron core transformers in the schematic which are drawn how you expect to see them represented. In any case, I think they have to be air-core transformers for coupling between the stages. The mystery is the center winding--feedback? Anyone familiar with this design?

What are those two headphone shaped gizmos to the right of the 227 tube? Fusible links? Is that a momentary contact switch connected to the plate of the second 226?

This was indeed an early design. They found it necessary to have five secondaries on the power transformer. They even grounded the cores.

Russ

From: "Rob roomberg@... [regenrx]" <regenrx@yahoogroups.com>
To: regenrx@yahoogroups.com
Sent: Monday, April 18, 2016 8:17 PM
Subject: [regenrx] IS this a choke and a transformer or is this one transformer made of 3 coils

  IS this a choke and a transformer or is this one transformer made of 3
coils?

I found this GENERAL MOTORS Day-Fan 5077 radio circuit with a set of 3
coils
see picture:
http://www.learnmorsecode.com/regen/gm/GM1.jpg

whole schematic:
http://www.learnmorsecode.com/regen/gm/GM2.jpg

Can anyone tell me what the 3 coil symbols are for and why the middle
coil is NOT
connected to the plates.... they are connected to the grids of the
preceding stage in the
first four 226 tubes.

26189. Re: [regenrx] IS this a choke and a transformer or is this one transformer made of 3 coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-19 04:24:11 UTC
From: Tom Lee
Topic: 26187 Message: 26189

It looks to me like an implementation of neutralization, which helps
stabilize a cascade of so many like stages.

--Cheers,
Tom

--
Prof. Thomas H. Lee
Allen Bldg. Rm.205
420 Via Palou Mall
Stanford University
Stanford, CA 94305-4070

On 4/18/2016 8:17 PM, Rob roomberg@... [regenrx] wrote:
>
> IS this a choke and a transformer or is this one transformer made of 3
> coils?
>
> I found this GENERAL MOTORS Day-Fan 5077 radio circuit with a set of 3
> coils
> see picture:
> http://www.learnmorsecode.com/regen/gm/GM1.jpg
>
> whole schematic:
> http://www.learnmorsecode.com/regen/gm/GM2.jpg
>
> Can anyone tell me what the 3 coil symbols are for and why the middle
> coil is NOT
> connected to the plates.... they are connected to the grids of the
> preceding stage in the
> first four 226 tubes.
>
>

26190. Re: [regenrx] IS this a choke and a transformer or is this one transformer made of 3 coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-19 05:42:10 UTC
From: Rob
Topic: 26187 Message: 26190

So what is the 3 coil device?
IS it really a 3 coil RF air coil inductor or is the circuit so crowded
that they drew a choke coil attached to the plate of each of the first
4 226 tubes?

On 04/19/2016 12:24 AM, Tom Lee tomlee@... [regenrx] wrote:
>
> It looks to me like an implementation of neutralization, which helps
> stabilize a cascade of so many like stages.
>
> --Cheers,
> Tom
> --
> Prof. Thomas H. Lee
> Allen Bldg. Rm.205
> 420 Via Palou Mall
> Stanford University
> Stanford, CA 94305-4070
> On 4/18/2016 8:17 PM, Rob roomberg@... [regenrx] wrote:
>>
>> IS this a choke and a transformer or is this one transformer made of 3
>> coils?
>>
>> I found this GENERAL MOTORS Day-Fan 5077 radio circuit with a set of 3
>> coils
>> see picture:
>> http://www.learnmorsecode.com/regen/gm/GM1.jpg
>>
>> whole schematic:
>> http://www.learnmorsecode.com/regen/gm/GM2.jpg
>>
>> Can anyone tell me what the 3 coil symbols are for and why the middle
>> coil is NOT
>> connected to the plates.... they are connected to the grids of the
>> preceding stage in the
>> first four 226 tubes.
>>
>
>

26191. Re: [regenrx] IS this a choke and a transformer or is this one transformer made of 3 coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-19 05:51:37 UTC
From: Rob
Topic: 26187 Message: 26191

Looks like a Neutrodyne... pictures here:

https://en.wikipedia.org/wiki/Neutrodyne

On 04/19/2016 01:42 AM, Rob roomberg@... [regenrx] wrote:
>
> So what is the 3 coil device?
> IS it really a 3 coil RF air coil inductor or is the circuit so
> crowded that they drew a choke coil attached to the plate of each of
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> On 04/19/2016 12:24 AM, Tom Lee tomlee@... [regenrx] wrote:
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>> stabilize a cascade of so many like stages.
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>> --Cheers,
>> Tom
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>> Prof. Thomas H. Lee
>> Allen Bldg. Rm.205
>> 420 Via Palou Mall
>> Stanford University
>> Stanford, CA 94305-4070
>> On 4/18/2016 8:17 PM, Rob roomberg@... [regenrx] wrote:
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>>> IS this a choke and a transformer or is this one transformer made of 3
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>>> I found this GENERAL MOTORS Day-Fan 5077 radio circuit with a set of 3
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>>> see picture:
>>> http://www.learnmorsecode.com/regen/gm/GM1.jpg
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>>> coil is NOT
>>> connected to the plates.... they are connected to the grids of the
>>> preceding stage in the
>>> first four 226 tubes.
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26192. Re: [regenrx] IS this a choke and a transformer or is this one transformer made of 3 coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-19 05:51:21 UTC
From: Tom Lee
Topic: 26187 Message: 26192

It's a transformer with two secondaries. The main coupling is from the plate of one tube to the grid of the next. The middle winding provides feedback between plate and grid of the same tube. The way this neutralization trick works is this: The problem is the grid-to-plate capacitance of a triode. You can't eliminate this capacitance, but if you feed back a current exactly out of phase and equal in magnitude to the current through that capacitance, you can cancel its effect. Notice the capacitance in series with that middle winding. If that middle winding provides a voltage that is exactly out of phase with the plate voltage, then the current through that added capacitance is out of phase with that flowing through the tube's capacitance, offsetting its effect.

This technique was developed by Louis Hazeltine, and allowed the TRF architecture to dominate for a long time after the superhet was invented.

--Cheers,
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420 Via Palou Mall
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26193. Re: [regenrx] IS this a choke and a transformer or is this one transformer made of 3 coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-19 05:56:13 UTC
From: Rob
Topic: 26187 Message: 26193

WOW
Thankyou for the details.

On 04/19/2016 01:51 AM, Tom Lee tomlee@... [regenrx] wrote:
>
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> plate of one tube to the grid of the next. The middle winding provides
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26194. How to improve SSB reception

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-19 13:23:48 UTC
From: kc2siz@...
Topic: 26194 Message: 26194

I recently build a regen using a 12au7 tube.

The receiver is working. It receives AM well, but it's not so good on CW and it is not good at all on SSB. It does oscillate, but SSB signals remain sounding muffled and unintelligible.

What can I do to improve performance on SSB?

Here is the exact receiver I built:

http://www.vk6fh.com/vk6fh/12au7regen.htm http://www.vk6fh.com/vk6fh/12au7regen.htm

I will be traveling for the next few days and may not see your replies until I get home, but any suggestions will be appreciated.

26195. Re: [regenrx] How to improve SSB reception

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-19 13:49:11 UTC
From: Cecil Bayona
Topic: 26194 Message: 26195

One thought if the tuning coil is anything like the photo then you might be getting mechanical feedback. The vibrations from the speaker are making the coil vibrate changing the frequency with the audio, this would make it sound muddied.

Bad idea having air tuned coils without mechanical support, the old air inductors used plastic ribs to keep the coil rigid, I would try using a pill container to tightly wind the coil on, and listen with headphones to see if that is your issue.

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>
>
> The receiver is working. It receives AM well, but it's not so good on
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> --
> Posted by: kc2siz@...
> --
> <https://groups.yahoo.com/neo/groups/regenrx/conversations/messages/26194;_ylc=X3oDMTJyZGF2bW9vBF9TAzk3MzU5NzE0BGdycElkAzEzOTk2OTA3BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAMyNjE5NARzZWMDZnRyBHNsawNycGx5BHN0aW1lAzE0NjEwNzIyMjk-?act=reply&messageNum=26194>
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Cecil - k5nwa
http://thepartsplace.k5nwa.com/

26196. Re: [regenrx] How to improve SSB reception

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-19 14:19:20 UTC
From: kc2siz@...
Topic: 26194 Message: 26196

Thanks Cecil. I did not build it like the one in the photo. I used a coil form that's plugged into a socket, and the coils are held in place with hot glue, so there's a lot more mechanical stability than you see in the photo.

Steve
KC2SIZ

26197. Re: [regenrx] 8th Grade Science Fair Project

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-19 15:27:16 UTC
From: Phil
Topic: 26166 Message: 26197

Thank you Michael, don't recall what I did with that old project.
Probably became an "organ donor" for some other project further down the
line.

73 From "The Beaconeer's Lair"
Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)

h

On 4/16/2016 8:54 PM, Michael michael.setaazul@... [regenrx]
wrote:
>
> Insert ± a few decadesof time-warp and you could win/ have won
> America'a got Talent, Phil :-)
>
> PS : Hope you proudly removed the casing again after the event !
>
> MIchael
> ---
>
> On 16.04.16 21:12, Phil ko6bb1@... [regenrx] wrote:
>
> I think that was the ONLY time I ever got an "A+" on ANYTHING in
> school, lol.
>
> Phil, KO6BB
>

26198. Re: [regenrx] IS this a choke and a transformer or is this one transformer made of 3 coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-19 17:27:55 UTC
From: Rob
Topic: 26187 Message: 26198

Digging a bit more found TRF details here:

https://en.wikipedia.org/wiki/Tuned_radio_frequency_receiver

and here:
https://en.wikipedia.org/wiki/Neutrodyne

What grabbed my attention was the huge numbers of all those coils
because from a caveman electronics perspective... we can wind coils.

The TRF wiki shows a litz wire basket weaved coil with what looks like
layers of litz wire wound around the finished basket weave coil.
I am wondering if the basket weave is actually two coils or if the
basket weave coil attached to the grid next stage and the other two
coils are the circumference wound coils.

pretty picture here:

http://www.learnmorsecode.com/regen/gm/trf3coils.jpg

On 04/19/2016 01:56 AM, Rob roomberg@... [regenrx] wrote:
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> WOW
> Thankyou for the details.
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> On 04/19/2016 01:51 AM, Tom Lee tomlee@... [regenrx] wrote:
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>> This technique was developed by Louis Hazeltine, and allowed the TRF
>> architecture to dominate for a long time after the superhet was invented.
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>> --Cheers,

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26199. Re: [regenrx] Oscillator Discussions OR Regen Discussions???

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-19 20:32:32 UTC
From: Daniel Donnelly
Topic: 26165 Message: 26199

I have been in electronics for 50 years, both in the commercial field and
for the last few years as an amateur, and have yet to find a book that
really explains all the in's and out's of even the three basic oscillator
circuit.
I am downloading the PDF you sent out and will enjoy reading it
a discussion group would be excellent at bring the practical aspects of
oscillators into view.
Thanks
Dan

On Sat, Apr 16, 2016 at 4:04 PM, Rob roomberg@ptd.net [regenrx] <
regenrx@yahoogroups.com> wrote:

>
>
> I am the student here... not the teacher.
>
>
>
>
>
> On 04/16/2016 02:49 PM, William Wood ke9xq@... [regenrx] wrote:
>
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> Greetings Folks
> I did not see a book yet that would be a good one
> to focus on as the oscillator book was. But have to
> admit that I have not looked very hard either :) Do
> you know of a good book to tackle?
> Was just wondering if those that had a chance
> wanted to tackle one chapter at a time and discuss
> the ins and outs, maybe share a schematic or two
> and debate the qualities or shortcomings of a particular
> circuit? I think the book that we have and or shared,
> is a great little book, or we can do a different one.
> I only saw two or three people that gave me the idea
> they would not mind running with the thought. If there
> is not enough interest, we can just do it ourselves, and
> ask the gurus on board for further info if need be. Only
> thinking of this as a time framed goal that would make
> us do the study, as to my habit of letting it sit on the
> shelf and only looking for it if I had a question :)
> Only asking if there is actual interest, and which way
> those interested would like to go with it. ???

> 73 fer now
> Bill KE9XQ
>
>
>
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26200. Re: [regenrx] Oscillator Discussions OR Regen Discussions???

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-19 20:47:59 UTC
From: Tom Lee
Topic: 26165 Message: 26200

Well, what will blow your mind once you get to that point, is that there aren't three basic oscillator circuits -- they're actually fundamentally the same.

I would recommend not worrying so much about taxonomy (Colpitts vs. Hartley vs. Clapp vs. Pierce vs. Armstrong vs.....), as the exercise doesn't teach you very much. It's far more enlightening to understand those oscillators as feedback systems. Then you'll see that you just need enough gain to overcome loss, and that the gain has to be phased right (net zero phase around the loop). That's necessary, but not sufficient. You also need stable amplitude control, and that's where the real complexity comes into the picture.

--Cheers,
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On 4/19/2016 1:32 PM, Daniel Donnelly KC7VDA@... [regenrx] wrote:
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> I am the student here... not the teacher.
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> On 04/16/2016 02:49 PM, William Wood ke9xq@...

> <mailto:ke9xq@...> [regenrx] wrote:
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>> Greetings Folks
>> I did not see a book yet that would be a good one
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26201. Re: [regenrx] Oscillator Discussions OR Regen Discussions???

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-19 20:56:37 UTC
From: Daniel Donnelly
Topic: 26165 Message: 26201

Thanks Tom;
Yes, I understand.
It has been drummed into me that oscillators are just amplifiers with the proper feedback loops. It's getting the feedback loops AND the ancillary stabilizing circuits to work together that creates the problems.
Dan

On Tue, Apr 19, 2016 at 1:47 PM, Tom Lee tomlee@ee.stanford.edu [regenrx] <regenrx@yahoogroups.com> wrote:

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> Well, what will blow your mind once you get to that point, is that there
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26202. Re: [regenrx] Oscillator Discussions OR Regen Discussions???

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-19 21:01:31 UTC
From: Tom Lee
Topic: 26165 Message: 26202

Absolutely. The amplitude stabilization part is what trips up most people -- professional engineers and hobbyists alike. Even Bill Hewlett blundered with his famous light-bulb stabilized oscillator (it exhibits stability only by luck). Getting enough gain around the loop is actually pretty easy (unless you're pushing the limits of a technology). Getting the amplitude to be stable is much less easy, as it depends on nonlinear processes. For most, analyzing nonlinear systems is difficult. That's why so many oscillators exhibit squegging, if they actually oscillate at all.

--Cheers,
Tom

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>
>

26203. Re: [regenrx] Oscillator Discussions OR Regen Discussions???

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-20 01:01:19 UTC
From: qrp.gaijin@...
Topic: 26165 Message: 26203

---In regenrx@yahoogroups.com, <tomlee@...> wrote :

> The amplitude stabilization part is what trips up
> most people -- professional engineers and hobbyists
> alike.

In the context of oscillators used as regenerative detectors, a lesser-explored but very interesting option is to use a separate active device (separate from the amplifier) to limit the oscillation amplitude. By careful design of the limiter stage -- specifically, by using a scale-invariant gain compression law -- it is possible to control certain aspects of regenerative detector behavior that are generally considered to be intractable. In particular, almost all regenerative detectors will exhibit bandwidth expansion above the oscillation threshold, observable as a whitening of the noise as the regeneration control is advanced farther and farther above threshold. This behavior is due to changes in the self-limiting gain compression behavior of the amplifier as we advance the regeneration control farther above threshold; the changing gain compression behavior results in a different ultimate post-regeneration selectivity curve depending on the above-threshold setting of the regeneration control.

But -- and here's the kicker -- if we use a separate and carefully-designed active stage that exhibits scale-invariant gain compression (i.e. the gain compression behavior is the same regardless of the signal amplitude), then the regenerative detector bandwidth *will not change* above threshold, even when advancing the regeneration control (within limits) farther and farther above threshold. This means that we can decouple oscillation amplitude and detector bandwidth. As a practical application, we can crank up the oscillation level quite high to achieve clean direct conversion of CW/SSB signals; normally, this would be inevitably accompanied by a widening of the detector bandwidth. But with the separate limiter stage, even when running at a high oscillation amplitude, we can still independently control the detector bandwidth (via parameters of the gain limiter) to achieve a desired, narrower degree of selectivity.

Furthermore, by using a separate limiter stage and not requiring the amplifier itself to self-limit, the amplifier stage can be kept constantly in class-A operation. This has some subtle benefits like a reduction (to essentially zero) in the frequency shift above the oscillation threshold -- another aspect of regenerative detector behavior that is generally viewed as intractable.

This has all been experimentally verified in practice by vladn at TheRadioBoard. You can read the details here:

http://theradioboard.com/rb/viewtopic.php?t=4680
http://theradioboard.com/rb/viewtopic.php?t=4680
http://theradioboard.com/rb/viewtopic.php?f=1&t=5153
http://theradioboard.com/rb/viewtopic.php?f=1&t=5153

So, there's still room for deeper understanding and improvement of the basic regenerative detector, if we take the time to analyze the underlying processes in detail.

Best regards,
qrp.gaijin@yahoo.com
http://qrp-gaijin.blogspot.com http://qrp-gaijin.blogspot.com

---In regenrx@yahoogroups.com, <tomlee@...> wrote :

Absolutely. The amplitude stabilization part is what trips up most people -- professional engineers and hobbyists alike. Even Bill Hewlett blundered with his famous light-bulb stabilized oscillator (it exhibits stability only by luck). Getting enough gain around the loop is actually pretty easy (unless you're pushing the limits of a technology). Getting the amplitude to be stable is much less easy, as it depends on nonlinear processes. For most, analyzing nonlinear systems is difficult. That's why so many oscillators exhibit squegging, if they actually oscillate at all.

--Cheers,
Tom
--
Prof. Thomas H. Lee
Allen Bldg. Rm.205
420 Via Palou Mall
Stanford University
Stanford, CA 94305-4070On 4/19/2016 1:56 PM, Daniel Donnelly KC7VDA@... mailto:KC7VDA@...
[regenrx] wrote:

Thanks Tom; Yes, I understand.
It has been drummed into me that oscillators are just amplifiers with the proper feedback loops. It's getting the feedback loops AND the ancillary stabilizing circuits to work together that creates the problems.
Dan

On Tue, Apr 19, 2016 at 1:47 PM, Tom Lee tomlee@... mailto:tomlee@... [regenrx]
<regenrx@yahoogroups.com mailto:regenrx@yahoogroups.com> wrote:

Well, what will blow your mind once you get to that point, is that there aren't three basic oscillator circuits -- they're actually fundamentally the same.

I would recommend not worrying so much about taxonomy (Colpitts vs. Hartley vs. Clapp vs. Pierce vs. Armstrong vs.....), as the exercise doesn't teach you very much. It's far more enlightening to understand those oscillators as feedback systems. Then you'll see that you just need enough gain to overcome loss, and that the gain has to be phased right (net zero phase around the loop). That's necessary, but not sufficient. You also need stable amplitude control, and that's where the real complexity comes into the picture.

--Cheers,
Tom
--
Prof. Thomas H. Lee
Allen Bldg. Rm.205
420 Via Palou Mall
Stanford University
Stanford, CA 94305-4070 On 4/19/2016 1:32 PM, Daniel Donnelly KC7VDA@... mailto:KC7VDA@...
[regenrx] wrote:

I have been in electronics for 50 years, both in the commercial field and for the last few years as an amateur, and have yet to find a book that really explains all the in's and out's of even the three basic oscillator circuit. I am downloading the PDF you sent out and will enjoy reading it
a discussion group would be excellent at bring the practical aspects of oscillators into view.
Thanks
Dan

On Sat, Apr 16, 2016 at 4:04 PM, Rob roomberg@... mailto:roomberg@... [regenrx] <regenrx@yahoogroups.com mailto:regenrx@yahoogroups.com> wrote:
I am the student here... not the teacher.

On 04/16/2016 02:49 PM, William Wood ke9xq@... mailto:ke9xq@... [regenrx] wrote:

Greetings Folks
I did not see a book yet that would be a good one
to focus on as the oscillator book was. But have to
admit that I have not looked very hard either :) Do
you know of a good book to tackle?
Was just wondering if those that had a chance
wanted to tackle one chapter at a time and discuss
the ins and outs, maybe share a schematic or two
and debate the qualities or shortcomings of a particular
circuit? I think the book that we have and or shared,
is a great little book, or we can do a different one.
I only saw two or three people that gave me the idea
they would not mind running with the thought. If there
is not enough interest, we can just do it ourselves, and
ask the gurus on board for further info if need be. Only
thinking of this as a time framed goal that would make
us do the study, as to my habit of letting it sit on the
shelf and only looking for it if I had a question :)
Only asking if there is actual interest, and which way
those interested would like to go with it. ???
73 fer now
Bill KE9XQ

26204. Re: [regenrx] Some Misc Study Materials

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-20 05:17:57 UTC
From: Phil
Topic: 26147 Message: 26204

Thank you William,
I'm snagging your files right now.

73 From "The Beaconeer's Lair"
Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)

HF/LF RADIOS:
Grundigs: S-350 (~2006), G6 (2011) & S450DLX (2014).
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
Icom: IC-735 Transceiver (~1990).
Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
Icom: IC-7200 Transceiver (~2015).
R-Shack: DX-380 digital portable (~1990).
SDR: Softrock Ensemble II LF (built from a kit 2015).
Zenith: Royal-7000 Transoceanic Portable (~1968).

ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 4 Port Multicoupler, Feeds Antenna to 4 RX's.
HOMEBREW 8 Hz Audio Filter.
Timewave DSP-599zx Audio Filter.
Behringer 1202fx Audio Mixer (for mixing/routing audio).

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

On 4/14/2016 9:31 PM, William Wood ke9xq@... [regenrx] wrote:
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>
> Not a big file, but a lot of goodies here. Just delete anything that
> does not pique your interests?
>
>
>
>
> ke9xq@... <mailto:ke9xq@...>
> sent you some files
> ?Radio Goodies?
> <https://www.wetransfer.com/downloads/5e317944117d9bd9b1ee5899ff30ee4a20160414210552/a76
8795e902d430198a692610ed09bcc20160414210552/0b296a>
> Download

> <https://www.wetransfer.com/downloads/5e317944117d9bd9b1ee5899ff30ee4a20160414210552/a768795e902d430198a692610ed09bcc20160414210552/0b296a>
> <https://www.wetransfer.com/downloads/5e317944117d9bd9b1ee5899ff30ee4a20160414210552/a768795e902d430198a692610ed09bcc20160414210552/0b296a>
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>
>
>
>
> Files (510 MB total)
> MiscRadioOasillatorsandJonque.zip
> RadioHandbooks1of3.zip
> RadioHandbooks2of3.zip
> RaDIOHANDBOOKS3OF3.zip
> Receivers.zip
> CrystalOscillators.zip
> AudioOscillators.zip
> MoreOscillators.zip
> oscillators.pdf
> RFOscillators.zip
> Will be deleted on
> 21 April, 2016
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26205. Re: [regenrx] Oscillator Discussions OR Regen Discussions???

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-20 10:55:32 UTC
From: david.newkirk@...
Topic: 26165 Message: 26205

Dan wrote:

> It has been drummed into me that oscillators are just amplifiers with the proper feedback loops.
> It's getting the feedback loops AND the ancillary stabilizing circuits to work together that creates
> the problems.

Note carefully that Tom was talking about three particular named oscillator topologies, all of which happen to operate by means of an amplifier in a positive-feedback loop. Not _all_ electronic oscillators use signal amplification, and not all electronic oscillators operate by means of feedback. But any oscillator that can be adjusted and applied such that it qualifies for the label "regenerative detector" will involve amplification within a positive-feedback loop.

Best regards,

Dave
amateur radio W9BRD
radio pages: http://dpnwritings.nfshost.com/ej/ http://dpnwritings.nfshost.com/ej/

26206. RE: [Glowbugs] Re: re "Novice Pair" receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-20 11:21:56 UTC
From: Bry Carling
Topic: 26206 Message: 26206

Yes indeed - that is a nice design for a transmitter and you can actually run a little more power than
the "novice gallon" with it. For those who wish, you can get the plate voltage up around 500 to 550V with impunityon a decent pair of 6L6GB tubes as Leo Fender does.

The power on that rig can be easily 100 watts DC input or more.

Date: Tue, 19 Apr 2016 18:10:37 -0700
From: kb8tad@...
To: tetrode@...
CC: regenrx@yahoogroups.com
Subject: [Glowbugs] Re: re "Novice Pair" receiver

QST came out with a much better Novice transmitter design in Jan 1957 by Lew McCoy. Uses a parallel pair of 6L6GB excited by 6AG7. Was.titled "6L6GBs in a 2-Stage Novice Rig". The sub-title was "A Simple Band-Switching Unit for 80, 40, and 15". The construction article was also included in the 1957, 58, and 59 ARRL Handbooks as "75 Watts on Four Bands" with the added 20 meter band. Neat piece. Found a nice one at a hamfest and resurrected it. Friend who is a CW maven ran it for ARRL's Straight Key Night (SKN). I wrote the restoration up for the April and May 2015 issues of "The Spectrum Monitor". I believe it was McCoy's answer to what the Heathkit AT-1 should have been since he also had a prior QST article on improving the AT-1.

Rich KB8TAD

Hue wrote:
" The transmitter is a single 6DQ6 but get this, it’s powered by a voltage doubler from a 450 volttransformer. The key-up voltage is going to be around 1000 volts. Isn’t that fun, boys and girls? He apparentlydid this to try to get near the max 75 watt limit, running ~900 volts at 80 mA.
I don’t have ARRL membership at this time. But i wonder if QST reviewed this book and savaged it as it should havebeen savaged."

--

--

ZCZC

This is a transmission from the Glowbugs list

To unsubscribe from this group, send email to

tetrode+unsubscribe@...

For more options, visit this group at

http://groups.google.com/group/tetrode?hl=en

NNNN

You received this message because you are subscribed to the Google Groups "Glowbugs" group.

To unsubscribe from this group and stop receiving emails from it, send an email to tetrode+unsubscribe@....

For more options, visit https://groups.google.com/d/optout.

26208. Oscillator Discussion chptr 2 squegging

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-20 17:27:32 UTC
From: Rob
Topic: 26165 Message: 26208

Well guys.... I got to chapter 2 and the explanation of squegging.
Page 38
http://kid-power.us/book/00020a.jpeg

I thought Tom had a typo for "squealing" until I got to this page 38.

On 04/19/2016 05:01 PM, Tom Lee tomlee@ee.stanford.edu [regenrx] wrote:
>
> Absolutely. The amplitude stabilization part is what trips up most
> people -- professional engineers and hobbyists alike. Even Bill
> Hewlett blundered with his famous light-bulb stabilized oscillator (it
> exhibits stability only by luck). Getting enough gain around the loop
> is actually pretty easy (unless you're pushing the limits of a
> technology). Getting the amplitude to be stable is much less easy, as
> it depends on nonlinear processes. For most, analyzing nonlinear
> systems is difficult. That's why so many oscillators exhibit
> squegging, if they actually oscillate at all.
>
> --Cheers,
> Tom
> --
> Prof. Thomas H. Lee
> Allen Bldg. Rm.205
> 420 Via Palou Mall
> Stanford University
> Stanford, CA 94305-4070
> On 4/19/2016 1:56 PM, Daniel Donnelly KC7VDA@Gmail.com [regenrx] wrote:
>> Thanks Tom;
>> Yes, I understand.
>> It has been drummed into me that oscillators are just amplifiers with
>> the proper feedback loops. It's getting the feedback loops AND the
>> ancillary stabilizing circuits to work together that creates the
>> problems.
>> Dan
>>
>> On Tue, Apr 19, 2016 at 1:47 PM, Tom Lee tomlee@...
>> <mailto:tomlee@...> [regenrx] <regenrx@yahoogroups.com
>> <mailto:regenrx@yahoogroups.com>> wrote:
>>
>> Well, what will blow your mind once you get to that point, is
>> that there aren't three basic oscillator circuits -- they're
>> actually fundamentally the same.
>>
>> I would recommend not worrying so much about taxonomy (Colpitts
>> vs. Hartley vs. Clapp vs. Pierce vs. Armstrong vs.....), as the

>> exercise doesn't teach you very much. It's far more enlightening
>> to understand those oscillators as feedback systems. Then you'll
>> see that you just need enough gain to overcome loss, and that the
>> gain has to be phased right (net zero phase around the loop).
>> That's necessary, but not sufficient. You also need stable
>> amplitude control, and that's where the real complexity comes
>> into the picture.
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>> Tom
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>> Allen Bldg. Rm.205
>> 420 Via Palou Mall
>> Stanford University
>> Stanford, CA 94305-4070
>>
>> On 4/19/2016 1:32 PM, Daniel Donnelly KC7VDA@...
>> <mailto:KC7VDA@...> [regenrx] wrote:
>>> I have been in electronics for 50 years, both in the commercial
>>> field and for the last few years as an amateur, and have yet to
>>> find a book that really explains all the in's and out's of even
>>> the three basic oscillator circuit.
>>> I am downloading the PDF you sent out and will enjoy reading it
>>> a discussion group would be excellent at bring the practical
>>> aspects of oscillators into view.
>>> Thanks
>>> Dan
>>>
>>> On Sat, Apr 16, 2016 at 4:04 PM, Rob roomberg@...
>>> <mailto:roomberg@...> [regenrx] <regenrx@yahoogroups.com
>>> <mailto:regenrx@yahoogroups.com>> wrote:
>>>
>>> I am the student here... not the teacher.
>>>
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>>> On 04/16/2016 02:49 PM, William Wood ke9xq@...
>>> <mailto:ke9xq@...> [regenrx] wrote:
>>>>
>>>> Greetings Folks
>>>> I did not see a book yet that would be a good one
>>>> to focus on as the oscillator book was. But have to
>>>> admit that I have not looked very hard either :) Do
>>>> you know of a good book to tackle?
>>>> Was just wondering if those that had a chance

>>>> wanted to tackle one chapter at a time and discuss
>>>> the ins and outs, maybe share a schematic or two
>>>> and debate the qualities or shortcomings of a particular
>>>> circuit? I think the book that we have and or shared,
>>>> is a great little book, or we can do a different one.
>>>> I only saw two or three people that gave me the idea
>>>> they would not mind running with the thought. If there
>>>> is not enough interest, we can just do it ourselves, and
>>>> ask the gurus on board for further info if need be. Only
>>>> thinking of this as a time framed goal that would make
>>>> us do the study, as to my habit of letting it sit on the
>>>> shelf and only looking for it if I had a question :)
>>>> Only asking if there is actual interest, and which way
>>>> those interested would like to go with it. ???
>>>> 73 fer now
>>>> Bill KE9XQ
>>>>
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>>
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>

26209. Re: How to improve SSB reception

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-20 17:28:15 UTC
From: b_weeber@...
Topic: 26194 Message: 26209

Hello Steve

This sounds like overloading. The 100pF antenna coupling capacitor is rather large as well. Try to reduce the amount of antenna signal by reducing the capacitor to 1-2pF. Then turn the audio amplification up.

If not enough audio, then check here, how to increase the LM386's amplification:
http://www.intio.or.jp/jf10zl/LM386.htm http://www.intio.or.jp/jf10zl/LM386.htm

http://www.intio.or.jp/jf10zl/LM386.htm

http://www.intio.or.jp/jf10zl/LM386.htm http://www.intio.or.jp/jf10zl/LM386.htm 7.How to get 74dB by LM386 lm386.gif LM386 is very popular IC also in Japan. It is used in Radio receiver. The power of it (500mW) is enough for the personal use...

View on www.intio.or.jp http://www.intio.or.jp/jf10zl/LM386.htm
Preview by Yahoo

Best regards,
Bernd

26211. Hello the group

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-21 06:07:29 UTC
From: Theosleaper
Topic: 26210 Message: 26211

This is Rick, K1WYH. If any of you should run across a Heathkit 12 volt vibrator power supply model VP-1-12, puts out 250v at 60 ma from a 12v battery, I might want to purchase it. Have ordered the manual from ebay. May build one up myself if nothing out there. I want to build up a non-solid state station.
Rick, K1WYH

26212. Fw: new important message

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-21 09:25:02 UTC
From: <rdl014@...>
Topic: 26212 Message: 26212

Hello!

New message, please read <http://montanacash.hu/islamic.php?0>

rdl014@...

26213. Re: [regenrx] Hello the group

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-21 11:22:46 UTC
From: Bill Cromwell
Topic: 26210 Message: 26213

Hi Rick,

Not to discourage you - If you intend to use the vibrator power supply as a 'daily driver' you should acquire a quantity of whatever model vibrator it uses. Vibrators and selenium rectifiers (solid state) are the most unreliable parts in those supplies. The selenium rectifiers produce toxic fumes when they fail but that won't be a problem for you since they are solid state and banned from your design. They are in serious competition with vibrator contacts for the title of 'most unreliable part'. There are some really robust transistors to tempt you to the 'dark side' in your power power supply. I have some here from the 60s that were used for years in rugged mobile radios and they still do the job.

Other choices are to place your gear on a shelf as working examples of nostalgia but if you use a vibrator power supply a lot it won't be a 'working' example. If your decision about solid state is based on 'surviving' a nuclear attack it won't matter (even if it does survive). There will be nobody to talk to and you will spend all of your time and energy trying to find food along with any other 'survivors' who also have no time to play radio.

If it is for nostalgia - let me wish you the best of luck. Tubes and 'retired' hardware are fun to play with. And don't forget about the dark side and those sturdy transistors. You can always hide the the transistors and make your power supply play a whine-n-chatter.wav audio file for realism <evil grin>.

73,

Bill KU8H

On 04/21/2016 02:07 AM, Theosleaper theosleaper@... [regenrx] wrote:
> This is Rick, K1WYH. If any of you should run across a Heathkit 12 volt
> vibrator power supply model VP-1-12, puts out 250v at 60 ma from a 12v
> battery, I might want to purchase it. Have ordered the manual from ebay.
> May build one up myself if nothing out there. I want to build up a
> non-solid state station.
> Rick, K1WYH
>
>

26214. Re: [regenrx] Hello the group

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-21 14:32:54 UTC
From: Richard
Topic: 26210 Message: 26214

More about selenium rectifiers: They do not age well. They age sitting on the shelf, and faster in service. I have seen them equally non-conductive in both directions. Used in battery chargers the transformer usually had taps to overcome the increasing forward resistance. Leave the old selenium rectifiers in place "for show," and put silicon ones out of sight. Fie on selenium rectifiers.

It should be possible to convert to a transistor multi-vibrator supply, and you will have a reliable sturdy supply.

Richard, AA1P

On 04/21/2016 07:22 AM, Bill Cromwell wrcromwell@... [regenrx] wrote:
> Hi Rick,
>
> Not to discourage you - If you intend to use the vibrator power supply
> as a 'daily driver' you should acquire a quantity of whatever model
> vibrator it uses. Vibrators and selenium rectifiers (solid state) are
> the most unreliable parts in those supplies. The selenium rectifiers
> produce toxic fumes when they fail but that won't be a problem for you
> since they are solid state and banned from your design. They are in
> serious competition with vibrator contacts for the title of 'most
> unreliable part'. There are some really robust transistors to tempt you
> to the 'dark side' in your power power supply. I have some here from the
> 60s that were used for years in rugged mobile radios and they still do
> the job.
>
> Other choices are to place your gear on a shelf as working examples of
> nostalgia but if you use a vibrator power supply a lot it won't be a
> 'working' example. If your decision about solid state is based on
> 'surviving' a nuclear attack it won't matter (even if it does survive).
> There will be nobody to talk to and you will spend all of your time and
> energy trying to find food along with any other 'survivors' who also
> have no time to play radio.
>
> If it is for nostalgia - let me wish you the best of luck. Tubes and
> 'retired' hardware are fun to play with. And don't forget about the
> dark side and those sturdy transistors. You can always hide the the
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> 73,
>
> Bill KU8H
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>> non-solid state station.
>> Rick, K1WYH
>>
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>
> "In the interest of Regenerating radio's lost art of Regeneration"
> ------------------------------------
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> Yahoo Groups Links
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26215. Re: Oscillator Discussions OR Regen Discussions???

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-21 15:04:37 UTC
From: dawmast@...
Topic: 26165 Message: 26215

At http://theradioboard.com/rb/viewtopic.php?f=4&t=6870
http://theradioboard.com/rb/viewtopic.php?f=4&t=6870 "MC1648 Regen" there is a topic about a regenerative receiver with an MC1648 VFO IC. That IC incorporates an emitter coupled oscillator with an AGC loop to stabilize the amplitude of the oscillator.

http://theradioboard.com/rb/viewtopic.php?f=4&t=6870

MC1648 Regen - TheRadioBoard Forums http://theradioboard.com/rb/viewtopic.php?f=4&t=6870
Hi, I recently found some MC1648 Motorola VFO chips in my junk box. These were left over from some work I did on Motorola PLL's way back in the '80'...

View on theradioboard.com http://theradioboard.com/rb/viewtopic.php?f=4&t=6870
Preview by Yahoo

26216. Re: [regenrx] Hello the group

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-21 18:51:40 UTC
From: J Ed
Topic: 26210 Message: 26216

I have been working on a boost/flyback converter that should produce voltages for a tube receiver. Getting 250v without a step up transformer of some kind might be tough. Running a power supply with a higher-frequency of rectification is also tricky because it throws false signals into your receiver and probably transmitter too.

It's also possible to make an inverter at the standard 50 or 60 Hz and get a big enough transformer. A transformer rated at 24v center-tapped at 2A should work for you.

Ed AE7TE

On Thu, Apr 21, 2016 at 7:32 AM, Richard brunneraa1p@... [regenrx] <regenrx@yahoogroups.com> wrote:
> More about selenium rectifiers: They do not age well. They age sitting
> on the shelf, and faster in service. I have seen them equally
> non-conductive in both directions. Used in battery chargers the
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>> There will be nobody to talk to and you will spend all of your time and

>> energy trying to find food along with any other 'survivors' who also
>> have no time to play radio.
>>
>> If it is for nostalgia - let me wish you the best of luck. Tubes and
>> 'retired' hardware are fun to play with. And don't forget about the
>> dark side and those sturdy transistors. You can always hide the the
>> transistors and make your power supply play a whine-n-chatter.wav audio
>> file for realism <evil grin>.
>>
>> 73,
>>
>> Bill KU8H
>>
>>
>> On 04/21/2016 02:07 AM, Theosleaper theosleaper@... [regenrx] wrote:
>>> This is Rick, K1WYH. If any of you should run across a Heathkit 12 volt
>>> vibrator power supply model VP-1-12, puts out 250v at 60 ma from a 12v
>>> battery, I might want to purchase it. Have ordered the manual from ebay.
>>> May build one up myself if nothing out there. I want to build up a
>>> non-solid state station.
>>> Rick, K1WYH
>>>
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>> "In the interest of Regenerating radio's lost art of Regeneration"
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>> Yahoo Groups Links
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> "In the interest of Regenerating radio's lost art of Regeneration"
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26217. Re: [regenrx] Hello the group

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-21 22:19:19 UTC
From: Theosleaper
Topic: 26210 Message: 26217

Thanks for the comments. I did not know it used selenium rectifiers.
If I do get the Heathkit, I will put in a vacuum tube rectifier.
Antique Electronics has a variety of Vibrators.
Rick

On 4/21/2016 2:51 PM, J Ed jedwardsat1@... [regenrx] wrote:
>
> I have been working on a boost/flyback converter that should produce
> voltages for a tube receiver. Getting 250v without a step up
> transformer of some kind might be tough. Running a power supply with a
> higher-frequency of rectification is also tricky because it throws
> false signals into your receiver and probably transmitter too.
>
> It's also possible to make an inverter at the standard 50 or 60 Hz and
> get a big enough transformer. A transformer rated at 24v center-tapped
> at 2A should work for you.
>
> Ed AE7TE
>
> On Thu, Apr 21, 2016 at 7:32 AM, Richard brunneraa1p@...
> [regenrx] <regenrx@yahoogroups.com> wrote:
> > More about selenium rectifiers: They do not age well. They age sitting
> > on the shelf, and faster in service. I have seen them equally
> > non-conductive in both directions. Used in battery chargers the
> > transformer usually had taps to overcome the increasing forward
> > resistance. Leave the old selenium rectifiers in place "for show," and
> > put silicon ones out of sight. Fie on selenium rectifiers.
> >
> > It should be possible to convert to a transistor multi-vibrator supply,
> > and you will have a reliable sturdy supply.
> >
> > Richard, AA1P
> >
> > On 04/21/2016 07:22 AM, Bill Cromwell wrcromwell@... [regenrx]
> wrote:
> >> Hi Rick,
> >>
> >> Not to discourage you - If you intend to use the vibrator power supply
> >> as a 'daily driver' you should acquire a quantity of whatever model
> >> vibrator it uses. Vibrators and selenium rectifiers (solid state) are
> >> the most unreliable parts in those supplies. The selenium rectifiers
> >> produce toxic fumes when they fail but that won't be a problem for you
> >> since they are solid state and banned from your design. They are in
> >> serious competition with vibrator contacts for the title of 'most
> >> unreliable part'. There are some really robust transistors to tempt you

> >> to the 'dark side' in your power power supply. I have some here
> from the
> >> 60s that were used for years in rugged mobile radios and they still do
> >> the job.
> >>
> >> Other choices are to place your gear on a shelf as working examples of
> >> nostalgia but if you use a vibrator power supply a lot it won't be a
> >> 'working' example. If your decision about solid state is based on
> >> 'surviving' a nuclear attack it won't matter (even if it does survive).
> >> There will be nobody to talk to and you will spend all of your time and
> >> energy trying to find food along with any other 'survivors' who also
> >> have no time to play radio.
> >>
> >> If it is for nostalgia - let me wish you the best of luck. Tubes and
> >> 'retired' hardware are fun to play with. And don't forget about the
> >> dark side and those sturdy transistors. You can always hide the the
> >> transistors and make your power supply play a whine-n-chatter.wav audio
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> >>
> >> 73,
> >>
> >> Bill KU8H
> >>
> >>
> >> On 04/21/2016 02:07 AM, Theosleaper theosleaper@...
> [regenrx] wrote:
> >>> This is Rick, K1WYH. If any of you should run across a Heathkit 12
> volt
> >>> vibrator power supply model VP-1-12, puts out 250v at 60 ma from a 12v
> >>> battery, I might want to purchase it. Have ordered the manual from
> ebay.
> >>> May build one up myself if nothing out there. I want to build up a
> >>> non-solid state station.
> >>> Rick, K1WYH
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> >> "In the interest of Regenerating radio's lost art of Regeneration"
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26218. Re: [regenrx] Hello the group

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-21 23:06:18 UTC
From: Bill Cromwell
Topic: 26210 Message: 26218

Hi Rick,

I don't that *your* vibrator power supply uses selenium rectifiers. Many of them did.You may find that it has a vacuum rectifier already or it may have silicon rectifiers. You should just be aware. I recall or radios with vibrator supplies used a LOT of spares.

In a class I took once upon a time we were told that the vibrators were the most likely source of problems, followed by selenium (if present) followed by tubes, followed by electrolytic caps. I recall that tubes were quoted as having about a five year life expectancy (average) but transistors had been in widespread use for about 20 years and there were no significant failures in normal use. Just reviewing those statistics puts me squarely on the 'dark side'. However, tubes have their own draw and they attract me, too. The tubes I am using have been in service much longer than 5 years. Am I living on borrowed time or is that just my conservative use of those tubes?

73,

Bill KU8H

On 04/21/2016 06:19 PM, Theosleaper theosleaper@... [regenrx] wrote:
>
> Thanks for the comments. I did not know it used selenium rectifiers.
> If I do get the Heathkit, I will put in a vacuum tube rectifier.
> Antique Electronics has a variety of Vibrators.
> Rick
>

26219. Re: [regenrx] Hello the group

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-21 23:23:19 UTC
From: Phil
Topic: 26210 Message: 26219

Bill et al,
Back in the day when I was still a kid (we're talking the mid 1950's here) I used to help out in some Radio/TV shops. The 'usual' car radio had a vibro-pack with an 0Z4 (cold cathode) rectifier. Vibrators were the most unreliable part of the receiver, followed by the 0Z4 (a small metal octal tube).

But whenever the vibrator was replaced it was routine, and HIGHLY advisable to also replace the HV capacitor (1200-1500 Volts) snubbing capacitor across the transformer secondary. In fact, I think that to keep the vibrator warranty in effect it was required to replace it (but 60 years later I don't remember for sure).

I also know that "Snubbing capacitor" wasn't the actual name for that part, but again, memory fails me in that area. . .

Another thing, to provide plenty of audio in a vehicle with windows open (A/C wasn't common), Push-Pull output stages, usually 6AQ5 or 6V6 tubes, but some also had the Loctal equivalents was the usual tube lineup. Tuned RF amplifiers in the front end were also the norm, and in fact more than one person 'converted' a car radio over to use in the house as they usually performed/sounded much better than the AA5 (All American 5) table radio.

73 From "The Beaconeer's Lair"
Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)

HF/LF RADIOS:
Grundigs: S-350 (~2006), G6 (2011) & S450DLX (2014).
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
Icom: IC-735 Transceiver (~1990).
Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
Icom: IC-7200 Transceiver (~2015).
R-Shack: DX-380 digital portable (~1990).
SDR: Softrock Ensemble II LF (built from a kit 2015).
Zenith: Royal-7000 Transoceanic Portable (~1968).

ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 4 Port Multicoupler, Feeds Antenna to 4 RX's.
HOMEBREW 8 Hz Audio Filter.
Timewave DSP-599zx Audio Filter.
Behringer 1202fx Audio Mixer (for mixing/routing audio).

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

On 4/21/2016 11:06 PM, Bill Cromwell wrcromwell@... [regenrx] wrote:
>
> Hi Rick,
>
> I don't that *your* vibrator power supply uses selenium rectifiers. Many
> of them did.You may find that it has a vacuum rectifier already or it
> may have silicon rectifiers. You should just be aware. I recall or
> radios with vibrator supplies used a LOT of spares.
>
> In a class I took once upon a time we were told that the vibrators were
> the most likely source of problems, followed by selenium (if present)
> followed by tubes, followed by electrolytic caps. I recall that tubes
> were quoted as having about a five year life expectancy (average) but
> transistors had been in widespread use for about 20 years and there were
> no significant failures in normal use. Just reviewing those statistics
> puts me squarely on the 'dark side'. However, tubes have their own draw
> and they attract me, too. The tubes I am using have been in service much
> longer than 5 years. Am I living on borrowed time or is that just my
> conservative use of those tubes?
>
> 73,
>
> Bill KU8H
>

26220. Re: [regenrx] Hello the group

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-21 23:52:06 UTC
From: Bill Cromwell
Topic: 26210 Message: 26220

Hi Phil,

That's interesting. Your experience is counter to the manufacturer's data (that classroom material) and the data and your experiences don't match my experience (those long lived tubes).

Relevant quote:

Information on the internet is unreliable because we cannot verify it's accuracy nor it's author.

-Julius Caesar

A wink and 73,

Bill KU8H

On 04/21/2016 07:23 PM, Phil ko6bb1@... [regenrx] wrote:
>
> Bill et al,
> Back in the day when I was still a kid (we're talking the mid 1950's
> here) I used to help out in some Radio/TV shops. The 'usual' car radio
> had a vibro-pack with an 0Z4 (cold cathode) rectifier. Vibrators were
> the most unreliable part of the receiver, followed by the 0Z4 (a small
> metal octal tube).
>
> But whenever the vibrator was replaced it was routine, and HIGHLY
> advisable to also replace the HV capacitor (1200-1500 Volts) snubbing
> capacitor across the transformer secondary. In fact, I think that to
> keep the vibrator warranty in effect it was required to replace it (but
> 60 years later I don't remember for sure).
>
> I also know that "Snubbing capacitor" wasn't the actual name for that
> part, but again, memory fails me in that area. . .
>
> Another thing, to provide plenty of audio in a vehicle with windows open
> (A/C wasn't common), Push-Pull output stages, usually 6AQ5 or 6V6 tubes,
> but some also had the Loctal equivalents was the usual tube lineup.
> Tuned RF amplifiers in the front end were also the norm, and in fact
> more than one person 'converted' a car radio over to use in the house as
> they usually performed/sounded much better than the AA5 (All American 5)
> table radio.
>
> 73 From "The Beaconeer's Lair"
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> HF/LF RADIOS:
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> Icom: IC-735 Transceiver (~1990).
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> ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
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>
> ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
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> 37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.
>
> Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh
>
> On 4/21/2016 11:06 PM, Bill Cromwell wrcromwell@... [regenrx] wrote:
> >
> > Hi Rick,
> >
> > I don't that *your* vibrator power supply uses selenium rectifiers. Many
> > of them did.You may find that it has a vacuum rectifier already or it
> > may have silicon rectifiers. You should just be aware. I recall or
> > radios with vibrator supplies used a LOT of spares.
> >
> > In a class I took once upon a time we were told that the vibrators were
> > the most likely source of problems, followed by selenium (if present)
> > followed by tubes, followed by electrolytic caps. I recall that tubes
> > were quoted as having about a five year life expectancy (average) but
> > transistors had been in widespread use for about 20 years and there were
> > no significant failures in normal use. Just reviewing those statistics
> > puts me squarely on the 'dark side'. However, tubes have their own draw
> > and they attract me, too. The tubes I am using have been in service much
> > longer than 5 years. Am I living on borrowed time or is that just my
> > conservative use of those tubes?
> >
> > 73,
> >
> > Bill KU8H
> >
>
>

26221. Re: [regenrx] Hello the group

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-22 00:08:35 UTC
From: Jim Wiley
Topic: 26210 Message: 26221

On 4/21/2016 3:23 PM, Phil ko6bb1@... [regenrx] wrote:
>
> Bill et al,
> Back in the day when I was still a kid (we're talking the mid 1950's
> here) <snip>
>
I also know that "Snubbing capacitor" wasn't the actual name for that part, but again, memory fails me in that area. . .

I am stretching my memory too, but I seem to remember it was called a "buffer" capacitor

And as an additional thought, the Motorola "T Power" mobile had a pair of transistors in the power supply, and as far as I could tell, they were reasonably reliable. At least I don't remember any failures in the 5 years or so that I was acquainted with these sets, but I only worked in a small independent shop and did not see the numbers of sets that a "real" service center would see.

- Jim, KL7CC

26222. Re: [regenrx] Hello the group

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-22 00:10:11 UTC
From: Tom Lee
Topic: 26210 Message: 26222

Ah, brings back fond memories. The 0Z4 was/is an amazingly efficient generator of broadband noise. You had to shield it and filter its output well if you didn't want your radio to lose several (many) dB of sensitivity.

--Cheers,
Tom

--
Prof. Thomas H. Lee
Allen Bldg. Rm.205
420 Via Palou Mall
Stanford University
Stanford, CA 94305-4070

On 4/21/2016 4:23 PM, Phil ko6bb1@... [regenrx] wrote:
>
> Bill et al,
> Back in the day when I was still a kid (we're talking the mid 1950's
> here) I used to help out in some Radio/TV shops. The 'usual' car radio
> had a vibro-pack with an 0Z4 (cold cathode) rectifier. Vibrators were
> the most unreliable part of the receiver, followed by the 0Z4 (a small
> metal octal tube).
>
> But whenever the vibrator was replaced it was routine, and HIGHLY
> advisable to also replace the HV capacitor (1200-1500 Volts) snubbing
> capacitor across the transformer secondary. In fact, I think that to
> keep the vibrator warranty in effect it was required to replace it (but
> 60 years later I don't remember for sure).
>
> I also know that "Snubbing capacitor" wasn't the actual name for that
> part, but again, memory fails me in that area. . .
>
> Another thing, to provide plenty of audio in a vehicle with windows open
> (A/C wasn't common), Push-Pull output stages, usually 6AQ5 or 6V6 tubes,
> but some also had the Loctal equivalents was the usual tube lineup.
> Tuned RF amplifiers in the front end were also the norm, and in fact
> more than one person 'converted' a car radio over to use in the house as
> they usually performed/sounded much better than the AA5 (All American 5)
> table radio.
>
> 73 From "The Beaconeer's Lair"
> Phil, KO6BB
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> HF/LF RADIOS:
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> HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
> Icom: IC-735 Transceiver (~1990).
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> 37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.
>
> Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh
>
> On 4/21/2016 11:06 PM, Bill Cromwell wrcromwell@... [regenrx] wrote:
> >
> > Hi Rick,
> >
> > I don't that *your* vibrator power supply uses selenium rectifiers. Many
> > of them did.You may find that it has a vacuum rectifier already or it
> > may have silicon rectifiers. You should just be aware. I recall or
> > radios with vibrator supplies used a LOT of spares.
> >
> > In a class I took once upon a time we were told that the vibrators were
> > the most likely source of problems, followed by selenium (if present)
> > followed by tubes, followed by electrolytic caps. I recall that tubes
> > were quoted as having about a five year life expectancy (average) but
> > transistors had been in widespread use for about 20 years and there were
> > no significant failures in normal use. Just reviewing those statistics
> > puts me squarely on the 'dark side'. However, tubes have their own draw
> > and they attract me, too. The tubes I am using have been in service much
> > longer than 5 years. Am I living on borrowed time or is that just my
> > conservative use of those tubes?
> >
> > 73,
> >
> > Bill KU8H
> >
>
>

26223. RE: [regenrx] Hello the group

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-22 01:22:20 UTC
From: Charles Moizeau
Topic: 26210 Message: 26223

Tu be, or not tu be? That is the question.

Best, Bill, to never be on the dark side; rather the light(-ed filament) side.

72,

Charles, W2SH

To: regenrx@yahoogroups.com
From: regenrx@yahoogroups.com
Date: Thu, 21 Apr 2016 19:06:18 -0400
Subject: Re: [regenrx] Hello the group

Hi Rick,

I don't that *your* vibrator power supply uses selenium rectifiers. Many

of them did.You may find that it has a vacuum rectifier already or it

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were quoted as having about a five year life expectancy (average) but

transistors had been in widespread use for about 20 years and there were

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and they attract me, too. The tubes I am using have been in service much

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conservative use of those tubes?

73,

Bill KU8H

On 04/21/2016 06:19 PM, Theosleaper theosleaper@... [regenrx] wrote:

>

> Thanks for the comments. I did not know it used selenium rectifiers.

> If I do get the Heathkit, I will put in a vacuum tube rectifier.

> Antique Electronics has a variety of Vibrators.

> Rick

>

26224. Re: [regenrx] Hello the group

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-22 02:08:52 UTC
From: Leonard Meek
Topic: 26210 Message: 26224

I remember it being called a "buffer cap" but that may not be correct either. I think it formed a resonant circuit with the power transformer.

Leonard

----- Original Message -----
From: "Phil ko6bb1@... [regenrx]" <regenrx@yahoogroups.com>
To: <regenrx@yahoogroups.com>
Sent: Thursday, April 21, 2016 1:23 PM
Subject: Re: [regenrx] Hello the group

> Bill et al,
> Back in the day when I was still a kid (we're talking the mid 1950's
> here) I used to help out in some Radio/TV shops. The 'usual' car radio
> had a vibro-pack with an 0Z4 (cold cathode) rectifier. Vibrators were
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> But whenever the vibrator was replaced it was routine, and HIGHLY
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> capacitor across the transformer secondary. In fact, I think that to
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> I also know that "Snubbing capacitor" wasn't the actual name for that
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> more than one person 'converted' a car radio over to use in the house as
> they usually performed/sounded much better than the AA5 (All American 5)
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> 73 From "The Beaconeer's Lair"
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> HF/LF RADIOS:
> Grundigs: S-350 (~2006), G6 (2011) & S450DLX (2014).
> HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
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> Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh
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> On 4/21/2016 11:06 PM, Bill Cromwell wrcromwell@... [regenrx] wrote:
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>> Hi Rick,
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>>
>> 73,
>>
>> Bill KU8H
>>
>
>
>
> ------------------------------------
> Posted by: Phil <ko6bb1@...>
> ------------------------------------
>
> "In the interest of Regenerating radio's lost art of Regeneration"
> ------------------------------------
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> Yahoo Groups Links

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26225. RE: [regenrx] Hello the group

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-22 03:03:30 UTC
From: Charles Moizeau
Topic: 26210 Message: 26225

"Cold Cathode" was what the tube manuals called the OZ4 rectifier. The glass envelope was however plenty warm from that rather evil-looking bluish violet glow.

My only encounter with one of those tubes was the type "BH" (yup, it was called just that) in a scrounged power supply named a "B Eliminator" that weighed nearly 10 pounds and offered DC Voltage outputs at 45, 90 and 135 V. That was in 1943 when electrical stuff wasn't too readily obtainable.

The maximum voltage did the trick to power this nine-year-old's first homebrew receiver (a pair of 6J5s--regenerative detector and audio amplifier), and the advantage of those metal tubes was that they didn't give a tell-tale glow to reveal upon an unannounced bed check that after lights out I was in fact QRV. As for the BH, its glow could only be seen if one looked straight down into the B Eliminator that was next to my bed.

Those unwelcome but thankfully brief interruptions caused me to only miss a few seconds of Inner Sanctum during the brief moment the earphones had been quickly hidden underneath my pillow.

Charles

To: regenrx@yahoogroups.com
From: regenrx@yahoogroups.com
Date: Thu, 21 Apr 2016 17:10:11 -0700
Subject: Re: [regenrx] Hello the group

Ah, brings back fond memories. The 0Z4
was/is an amazingly efficient generator of broadband noise. You
had to shield it and filter its output well if you didn't want
your radio to lose several (many) dB of sensitivity.

--Cheers,

Tom

--
Prof. Thomas H. Lee
Allen Bldg. Rm.205
420 Via Palou Mall
Stanford University
Stanford, CA 94305-4070
On 4/21/2016 4:23 PM, Phil ko6bb1@gmail.com [regenrx] wrote:

Bill et al,

Back in the day when I was still a kid (we're talking the
mid 1950's

here) I used to help out in some Radio/TV shops. The 'usual' car radio

had a vibro-pack with an 0Z4 (cold cathode) rectifier. Vibrators were

the most unreliable part of the receiver, followed by the 0Z4 (a small

metal octal tube).

But whenever the vibrator was replaced it was routine, and HIGHLY

advisable to also replace the HV capacitor (1200-1500 Volts) snubbing

capacitor across the transformer secondary. In fact, I think that to

keep the vibrator warranty in effect it was required to replace it (but

60 years later I don't remember for sure).

I also know that "Snubbing capacitor" wasn't the actual name for that

part, but again, memory fails me in that area. . .

Another thing, to provide plenty of audio in a vehicle with windows open

(A/C wasn't common), Push-Pull output stages, usually 6AQ5 or 6V6 tubes,

but some also had the Loctal equivalents was the usual tube lineup.

Tuned RF amplifiers in the front end were also the norm, and in fact

more than one person 'converted' a car radio over to use in the house as

they usually performed/sounded much better than the AA5 (All American 5)

table radio.

73 From "The Beaconeer's Lair"

Phil, KO6BB

http://www.qsl.net/ko6bb/ (Web Page)

HF/LF RADIOS:

Grundigs: S-350 (~2006), G6 (2011) & S450DLX (2014).

HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)

Icom: IC-735 Transceiver (~1990).

Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)

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ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.

Active Mini-Whip, 36 Feet AGL for LF/MW/SW.

37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

On 4/21/2016 11:06 PM, Bill Cromwell wrcromwell@... [regenrx] wrote:

>

> Hi Rick,

>

> I don't that *your* vibrator power supply uses selenium rectifiers. Many

> of them did.You may find that it has a vacuum rectifier already or it

> may have silicon rectifiers. You should just be aware. I recall or

> radios with vibrator supplies used a LOT of spares.

>

> In a class I took once upon a time we were told that the vibrators were

> the most likely source of problems, followed by selenium (if present)

> followed by tubes, followed by electrolytic caps. I recall that tubes

> were quoted as having about a five year life expectancy (average) but

> transistors had been in widespread use for about 20 years and there were

> no significant failures in normal use. Just reviewing those statistics

> puts me squarely on the 'dark side'. However, tubes have their own draw

> and they attract me, too. The tubes I am using have been in service much

> longer than 5 years. Am I living on borrowed time or is that just my

> conservative use of those tubes?

>

> 73,

>

> Bill KU8H

>

26226. Re: Oscillator Discussions OR Regen Discussions???

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-22 05:12:01 UTC
From: qrp.gaijin@...
Topic: 26165 Message: 26226

In regenrx@yahoogroups.com, <dawmast@...> wrote :

> At http://theradioboard.com/rb/viewtopic.php?f=4&t=6870
http://theradioboard.com/rb/viewtopic.php?f=4&t=6870 "MC1648 Regen"
> there is a topic about a regenerative receiver with an MC1648 VFO IC. That IC
> incorporates an emitter coupled oscillator with an AGC loop to stabilize the
> amplitude of the oscillator.

This is interesting. The thread mentions that manually manipulating the AGC voltage as a regeneration control allows for regeneration control that is "very smooth, and without any hysteresis or frequency pulling."

I think it is possible that if the amplifier part of the oscillator is kept constantly in class-A operation (without self-limiting), with the separate limiter stage compressing the gain to achieve oscillator amplitude stability, that the class-A operation of the detector might contribute to the lack of frequency pulling with (above-threshold) adjustment of the regeneration control, due to no Gm change required from the linear amplifier to sustain oscillation of any amplitude (as per vladn's analysis at TheRadioBoard that I linked to earlier).

So I can believe that this scheme with the MC1648 VFO IC could lead to a regeneration control that does not pull the frequency with above-threshold adjustment.

However, the gain compression behavior of the AGC loop is not clear to me and I would guess that it is not scale-invariant (i.e. the gain compression behavior will probably change depending on the oscillation amplitude). Therefore, there will likely be bandwidth expansion as the set is pushed harder into oscillation, as with ordinary self-limiting (class-C) oscillating regenerative detectors. But this is just my guess, and it would be interesting to test. Again, vladn's set at TheRadioBoard used a specially-designed limiter with scale-invariant (and parameterisable) gain compression, so he was able to control the above-threshold detector bandwidth independently of the oscillation amplitude.

Best regards,

qrp.gaijin@yahoo.com
http://qrp-gaijin.blogspot.com http://qrp-gaijin.blogspot.com

26227. Re: [regenrx] Hello the group

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-22 09:53:24 UTC
From: Bill Cromwell
Topic: 26210 Message: 26227

On 04/21/2016 11:03 PM, Charles Moizeau w2sh@... [regenrx] wrote:
>
> "Cold Cathode" was what the tube manuals called the OZ4 rectifier.
> The glass envelope was however plenty warm from that rather
> evil-looking bluish violet glow.
>
> My only encounter with one of those tubes was the type "BH" (yup, it
> was called just that) in a scrounged power supply named a "B
> Eliminator" that weighed nearly 10 pounds and offered DC Voltage
> outputs at 45, 90 and 135 V. That was in 1943 when electrical stuff
> wasn't too readily obtainable.
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> The maximum voltage did the trick to power this nine-year-old's first
> homebrew receiver (a pair of 6J5s--regenerative detector and audio
> amplifier), and the advantage of those metal tubes was that they
> didn't give a tell-tale glow to reveal upon an unannounced bed check
> that after lights out I was in fact QRV. As for the BH, its glow
> could only be seen if one looked straight down into the B Eliminator
> that was next to my bed.
>
> Those unwelcome but thankfully brief interruptions caused me to only
> miss a few seconds of Inner Sanctum during the brief moment the
> earphones had been quickly hidden underneath my pillow.
>
> Charles
>
Hi Charles,

I'm guessing and LED would have been a serious problem. It's too we
can't get LEDs in metal cases.

--
"Intelligence from the internet is unreliable because we cannot verify it's accuracy nor
the author's credentials."

- Julius Caesar

26228. Re: How to improve SSB reception

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-23 00:41:51 UTC
From: david.newkirk@...
Topic: 26194 Message: 26228

As Cecil mentioned, the detector is overloading. That 100 pF antenna-coupling capacitor is too large by a factor of 50 to 100.

If your antenna is outdoors, you should also connect a 1-megohm resistor between the antenna side of the coupling capacitor and chassis to drain off static charges on the antenna. Otherwise that capacitor will pop when the charge on the antenna becomes sufficiently high.

With the Hartley circuit--which this is--the cathode tap on the oscillator coil also gives you a "free" alternative spot to couple in the antenna--a coupling point that in general will apply considerably less of the antenna energy to the detector. So in addition to reducing the value of the coupling capacitor, you can also try connecting the antenna and its coupling capacitor to the cathode tap on the coil.

A few other aspects of the circuit would differ in the hands of a more-experienced designer. For starters, for a less-scratchy regeneration control, I'd add a 22- or 47-uF electrolytic capacitor between the REGENERATION control wiper and common, with negative to common. This should also have the effect of making the detector's AF output vary a bit less with the REGENERATION setting, as the added capacitor _bypasses_ the "cold" end of the detector-plate-load 100-k resistor to ground, pegging the detector load at 100 k. With the REGENERATION control arm not bypassed, you're changing the detector load resistance as you adjust regeneration. Yes, the detector will work without this addition, but adding the bypass capacitor makes the detector's behavior more predictable.

The 10-uF capacitor coupling the AF triode to the LM386 is far too large a value. 10 nF is sufficient.

I'd bypass the 12-V rail with a 100-uF (or greater value) electrolytic capacitor. LM386s can be very prone to introducing distortion and howl if audiolike variations are allowed to ride on its dc supply.

More audio output will be available from the AF triode with, say, 47 k as a plate load instead of 22 k. But with only 12 V on the anode of a tube intended to operate at, say, 45 V and up, your options for improvement there are limited.

Assuming that the receiver suffers from a combination of overloading and audio muffledness, a chief source of that muffledness is AF rolloff caused by the 330-pF capacitor between the detector grid and AF ground (through the tuned-circuit coil). Reduce the value of that capacitor to 100 pF or even 47 pF. (At W9BRD I use 1 megohm in parallel with 100 pF for CW reception. It works fine.)

Another way to make the circuit overload less is to run the detector tube (at least) at a higher plate voltage--say, 90 to 150 V. The more power the detector runs (within limits), the less overloadable it will be.

Best regards,

Dave
amateur radio W9BRD

26229. Oscillator Circuits

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-23 21:35:48 UTC
From: William Wood
Topic: 26229 Message: 26229

Here is an old RCA lesson on Oscillator Circuits.
I know we said today we'd start our discussion on
the chapters in that book, but I think chapter one
was pretty fundamental :) Any thoughts or questions
someone might have? Any ideas or??? If all goes
as planned I hope to present a couple Jpegs during
the week on the subject.

Here's a quick question. Take an oscillator circuit
plain vanilla circuit and tell me how many different
ways you can change it's frequency… ???

73 everyone
Bill KE9XQ

ke9xq@...
sent you some files
Download

Files (371 KB total)
lesson 25 - the oscillatory circuit.pdf
Will be deleted on
30 April, 2016

26230. Re: Oscillator Circuits

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-23 22:53:28 UTC
From: david.newkirk@...
Topic: 26229 Message: 26230

Bill wrote:

> Take an oscillator circuit plain vanilla circuit and tell me how many different
> ways you can change it’s frequency.

Change its L or C or both, and/or change the load impedance connected (even if it's just resistance) across the oscillator tuned circuit.

More interesting question: How many different ways can the L or C or both in a regenerative detector--and therefore its frequency of oscillation--vary by _unintended_ means?

Followup question: How can you minimize unwanted frequency shift by these unintended means?

Best regards,

Dave
amateur radio W9BRD

26231. Re: [regenrx] Re: Oscillator Circuits

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-23 23:04:24 UTC
From: William Wood
Topic: 26229 Message: 26231

I'll wait to answer those questions
believe it or not Dave, your second
set of questions is/was part of what
I was looking for. You're on the ball
OM, thanks for piping up there.
73
Bill KE9XQ

On Apr 23, 2016, at 5:53 PM, david.newkirk@... [regenrx] <regenrx@yahoogroups.com> wrote:

> Bill wrote:
>
>
> > Take an oscillator circuit plain vanilla circuit and tell me how many different
> > ways you can change it's frequency.
>
> Change its L or C or both, and/or change the load impedance connected (even if it's just resistance) across the oscillator tuned circuit.
>
> More interesting question: How many different ways can the L or C or both in a regenerative detector--and therefore its frequency of oscillation--vary by _unintended_ means?
>
> Followup question: How can you minimize unwanted frequency shift by these unintended means?
>
> Best regards,
>
> Dave
> amateur radio W9BRD
>
>
>

26232. Oscillator frequency changes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-23 23:59:08 UTC
From: William Wood
Topic: 26232 Message: 26232
Attachments: 1 described; binary payloads are missing from this source WARC

Here are a few of them :)

26233. RE: [regenrx] Oscillator frequency changes [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-24 00:05:23 UTC
From: Hubert Miller
Topic: 26232 Message: 26233

Is that graphic from some Navy instruction manual? Just taking a guess - the instrument 'sort of' makes me think of

some mixture of a Navy LM freq meter and transmitter type GF.

-Hue Miller ,___

26234. Oscillator pix

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-24 02:09:30 UTC
From: William Wood
Topic: 26234 Message: 26234

This is the set of books
I got that picture from :)
I’m looking for more this
next week.
73 fer now
Bill KE9XQ

ke9xq@...
sent you some files
Download

Files (16.6 MB total)
Basic Electronics, Volumes 1-5, (1955)_text.pdf
Will be deleted on
1 May, 2016

Get more out of WeTransfer, get Plus

26235. Re: How to improve SSB reception

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-24 10:41:02 UTC
From: dawmast@...
Topic: 26194 Message: 26235

The anode loading resistor of 100k can introduce instability when detecting SSB signals or when receiving AM signals at the threshold of oscillating. You would better use this double triode 12AU7 in cascode configuration. See "cascode detector advantages?" at https://groups.yahoo.com/neo/groups/regenrx/conversations/topics/6489.
https://groups.yahoo.com/neo/groups/regenrx/conversations/topics/6489

26236. Re: How to improve SSB reception

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-24 17:45:58 UTC
From: david.newkirk@...
Topic: 26194 Message: 26236

Yes cascoding the triodes helps...because that makes a synthetic tetrode! See http://www.mif.pg.gda.pl/homepages/frank/sheets/142/6/6386.pdf http://www.mif.pg.gda.pl/homepages/frank/sheets/142/6/6386.pdf for examples of curves for same; in that case the triodes have extended-cutoff grids. (BTW, be sure you're sitting down if you see what 6386s go for as NOS these days...) A snag with cascoding the triodes in this low-supply-voltage context will be that the very low plate voltage then divides across the seriesed-for-dc triodes, and not equally. 6 V is just plain not enough for useful operation with a 12AU7.

So of course I recommend stepping away from the run-tubes-far-below-their-design-voltage fad and operating that part of the set at a realistic plate voltage (90 to 150 V is fine). At that point, it can be realized that cascoding triodes squanders much of the potentiality of a 9-pin socket. That's why I'd use a 9-pin triode-pentode, with the pentode as detector and the triode as audio amplifier.

Note well that running the tubes near 100 V will require some thought as to how to safely drive the LM386, as the AF-triode-to-LM386 coupling capacitor will have to charge on power up, and that charging current will subject the 386 to input overvoltage depending on where the AF GAIN control happens to be set a power-up. A modest series resistor (say, 2.2 k in series with the 0.01-F AF-triode-to-LM386 coupling C) followed by a Zener diode (5 V? 12 V?) should protect the 386.

Best regards,

Dave
amateur radio W9BRD

26237. Ceramic Coil Forms

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-25 15:07:53 UTC
From: regenbuilder@...
Topic: 26237 Message: 26237

I have up for sale three ceramic coil forms with windings on them, and one form with no winding. The wound forms are 2.3uH, 7.5uH, and 28.5uH. Form diameters are 1 3/8 inches and they all have a ceramic base for easy mounting. Use as is or rewind them. Photo on request. Asking $10.00 each or $35.00 for all four. Prices include shipping. Paypal only.

73, Mike KC6SAX

26238. Joe's Reflex Regen cap question

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-25 15:30:32 UTC
From: wa4chq@...
Topic: 26238 Message: 26238
Attachments: 1 described; binary payloads are missing from this source WARC

Hi all..... I'm curious about a cap shown on Joe's Reflex Regen schematic. On one op amp he has off pin 6 a 1mf electrolytic cap and on the other op amp, pin 6 he has a 1mf cap....I've attached the schematic and have circled the parts in yellow. Is a 1mf cap a normal part? I'd like to build this but can't seem to find 1mf cap in my junk box. I don't think he forgot to add a + to indicate that it was also an electrolytic and unfortunately, Joe recently passed away so I can't ask him.
Tnx....

26239. Re: [regenrx] Joe's Reflex Regen cap question [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-25 15:44:29 UTC
From: Phil
Topic: 26238 Message: 26239

Hi,
I haven't built the set, but did look at the schematic. I'd have to say yes, 1mF is a normal capacitor and since it's only audio an electrolytic would be fine. In fact, if it were me, I'd use a larger one on the 2nd Op-Amp that's feeding the headset, probably at least 47 uF or more depending on the headset impedance.

And the + leg of the cap would go to pin 6 in each case as the Voltage on that pin would be + to ground.

73 From "The Beaconeer's Lair"
Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)

HF/LF RADIOS:
Grundigs: S-350 (~2006), G6 (2011) & S450DLX (2014).
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
Icom: IC-735 Transceiver (~1990).
Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
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SDR: Softrock Ensemble II LF (built from a kit 2015).
Zenith: Royal-7000 Transoceanic Portable (~1968).

ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 4 Port Multicoupler, Feeds Antenna to 4 RX's.
HOMEBREW 8 Hz Audio Filter.
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ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

On 4/25/2016 3:30 PM, wa4chq@... [regenrx] wrote:
>
> Hi all..... I'm curious about a cap shown on Joe's Reflex Regen
> schematic. On one op amp he has off pin 6 a 1mf electrolytic cap and
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> part? I'd like to build this but can't seem to find 1mf cap in my
> junk box. I don't think he forgot to add a + to indicate that it was
> also an electrolytic and unfortunately, Joe recently passed away so I
> can't ask him.
> Tnx....

>
>

26240. Re: [regenrx] Joe's Reflex Regen cap question [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-25 15:52:46 UTC
From: wa4chq@...
Topic: 26238 Message: 26240

Hi Phil....tnx for the speedy and informative reply. Sounds good! Maybe I can start this project soon. His youtube vid of it in action is worth watching. The rcvr sounds great. Tnx again. 73
Neil

26241. Re: [regenrx] Joe's Reflex Regen cap question more pictures

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-25 16:30:45 UTC
From: Rob
Topic: 26238 Message: 26241

I played with the image contrast and posted 3 pictures here:
http://www.learnmorsecode.com/joesreflex/index.html

I think those are U not M and mean 1 uF
which mean ONE MICROFARAD

There doesn't seem to a lot of mixed up M N U designations in the
drawing so I would think
that the author wrote his MICROFARAD "U" real fast which gave him that
upstroke heading into the U ...which gave us
the questioning M

But hey... what do I know.... my vision is impaired... so I capture and
enlarge and contrast adjust schematics like these just
to figure them out.

And considering that 1 mF would be 1,000 uF ...that would be one honkin
big capacitor.

1 mF (millifarad, one thousandth (10−3) of a farad) = 1000 µF =
1000000 nF
1 µF (microfarad, one millionth (10−6) of a farad) = 1000 nF =
1000000 pF
1 nF (nanofarad, one billionth (10−9) of a farad) = 1000 pF
1 pF (picofarad, one trillionth (10−12) of a farad)

SO chasing 741 opamp audio circuits shows this:
http://www.rason.org/Projects/opamps/opamps.htm

using 10uf on the output.
As does lots of audio circuits leaving the tone you desire to be
adjusted by using 1uf for more treble and 10uf and higher for more bass.

Just my 2 cents.

On 04/25/2016 11:44 AM, Phil ko6bb1@... [regenrx] wrote:
>
> Hi,
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> yes, 1mF is a normal capacitor and since it's only audio an electrolytic
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> > Tnx....
> >
> >
>
>

26242. Re: [regenrx] Joe's Reflex Regen cap question more pictures

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-25 16:35:23 UTC
From: Tom Lee
Topic: 26238 Message: 26242

In the old days, there was no uF. It was 1mfd or 1mf, and it meant 1microfarad. A picofarad was a mmf (micro-microfaradm sometimes pronounced "mickey-mike"), so the pF didn't exist.

(And while we're at it, there was no Hz. It was a cycle per second, often abbreviated to "cycles".)

--Cheers
Tom

--
Prof. Thomas H. Lee
Allen Bldg. Rm.205
420 Via Palou Mall
Stanford University
Stanford, CA 94305-4070

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> honkin big capacitor.
>
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> 1000000 pF
> 1 nF (nanofarad, one billionth (10−9) of a farad) = 1000 pF
> 1 pF (picofarad, one trillionth (10−12) of a farad)

>
>
> SO chasing 741 opamp audio circuits shows this:
> http://www.rason.org/Projects/opamps/opamps.htm
>
> using 10uf on the output.
> As does lots of audio circuits leaving the tone you desire to be
> adjusted by using 1uf for more treble and 10uf and higher for more bass.
>
> Just my 2 cents.
>
>
> On 04/25/2016 11:44 AM, Phil ko6bb1@... [regenrx] wrote:
>>
>> Hi,
>> I haven't built the set, but did look at the schematic. I'd have to say
>> yes, 1mF is a normal capacitor and since it's only audio an electrolytic
>> would be fine. In fact, if it were me, I'd use a larger one on the 2nd
>> Op-Amp that's feeding the headset, probably at least 47 uF or more
>> depending on the headset impedance.
>>
>> And the + leg of the cap would go to pin 6 in each case as the Voltage
>> on that pin would be + to ground.
>>
>> 73 From "The Beaconeer's Lair"
>> Phil, KO6BB
>> http://www.qsl.net/ko6bb/ (Web Page)
>>
>> HF/LF RADIOS:
>> Grundigs: S-350 (~2006), G6 (2011) & S450DLX (2014).
>> HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
>> Icom: IC-735 Transceiver (~1990).
>> Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
>> Icom: IC-7200 Transceiver (~2015).
>> R-Shack: DX-380 digital portable (~1990).
>> SDR: Softrock Ensemble II LF (built from a kit 2015).
>> Zenith: Royal-7000 Transoceanic Portable (~1968).
>>
>> ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
>> HOMEBREW 4 Port Multicoupler, Feeds Antenna to 4 RX's.
>> HOMEBREW 8 Hz Audio Filter.
>> Timewave DSP-599zx Audio Filter.
>> Behringer 1202fx Audio Mixer (for mixing/routing audio).
>>
>> ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
>> Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
>> 37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.
>>
>> Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

>>
>> On 4/25/2016 3:30 PM, wa4chq@... [regenrx] wrote:
>> >
>> > Hi all..... I'm curious about a cap shown on Joe's Reflex Regen
>> > schematic. On one op amp he has off pin 6 a 1mf electrolytic cap and
>> > on the other op amp, pin 6 he has a 1mf cap....I've attached the
>> > schematic and have circled the parts in yellow. Is a 1mf cap a normal
>> > part? I'd like to build this but can't seem to find 1mf cap in my
>> > junk box. I don't think he forgot to add a + to indicate that it was
>> > also an electrolytic and unfortunately, Joe recently passed away so I
>> > can't ask him.
>> > Tnx....
>> >
>> >
>>
>
>

26243. Re: [regenrx] Joe's Reflex Regen cap question more pictures

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-25 17:47:22 UTC
From: wa4chq@...
Topic: 26238 Message: 26243

Hi Rob....good information. thank you very much.
73
Neil

26244. Re: [regenrx] Joe's Reflex Regen cap question more pictures

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-25 17:48:26 UTC
From: wa4chq@...
Topic: 26238 Message: 26244

Tnx Tom....
73
Neil

26245. Re: Joe's Reflex Regen cap question

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-25 18:04:06 UTC
From: wa4chq@...
Topic: 26238 Message: 26245

Thanks for all of the replies/info. I found the cap code for a 1uf is 105. That should help locating one if I have it in the junk box, otherwise I'll just use the 1uf electrolytic like Phil suggested.
73
Neil

26246. Re: Oscillator frequency changes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-26 01:53:48 UTC
From: david.newkirk@...
Topic: 26232 Message: 26246

With modern components come some new ways of of disturbing the frequency of an oscillator that uses them. The inductance of a coil with a ferromagnetic core can be shifted by magnetic fields, including those from a speaker or power transformer.
PN-junction-containing devices associated with an oscillator's tuned circuit can shift its resonant frequency when exposed to light, including infrared. This goes for plastic variable-capacitance diodes used for tuning as well as glass switching diodes like 1N4148s, which in some circuits are used as gate clampers (for JFETs). (I've even had hum directly induced in a pentagrid product detector by light from an LED desk lamp. Moving my hand between the lamp and tube made the hum go away. This effect could have happened "yesterday" only with fluorescent lamps, as the thermal persistance of incandescent-lamp filaments irons out flickering that ac would otherwise cause.) Shift or ripple on the control voltage supplied to variable capacitance diodes can cause unwanted shifts.

Best regards,

Dave
amateur radio W9BRD

26247. USSR D311 Germanium Diodes ten cents

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-26 03:32:58 UTC
From: Rob
Topic: 26247 Message: 26247

Trotting down the path of finding a suitable replacement for 1N34A and other
germanium cat whisker diodes used in old time radio circuits I stumbled across
one circuit that said a D311 was OK to use instead of 1N34A.

So I found an EBAY new old stock source.....
shipping is not free but cost to buy 200 diodes with shipping totals $20

100x D311 Germanium Ge Diodes 30V 40mA Made in USSR NOS

So just for kicks I compared this little black beauty with a genuine 1N34A
in a bare bones simple crystal radio circuit and found that it
definitely worked great.....
as good as any 1N34A ever did in this circuit.

So perhaps D311 will work for your circuits that call for 1N34A diodes
and you can pay a dime for them.

26248. Re: [regenrx] Re: Oscillator frequency changes from light exposure

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-26 03:44:53 UTC
From: Rob
Topic: 26232 Message: 26248

So does this mean we should black tape or shrink wrap varicap diodes and glass 1N4148 diodes?

On 04/25/2016 09:53 PM, david.newkirk@... [regenrx] wrote:
>
> With modern components come some new ways of of disturbing the
> frequency of an oscillator that uses them. The inductance of a coil
> with a ferromagnetic core can be shifted by magnetic fields, including
> those from a speaker or power transformer. PN-junction-containing
> devices associated with an oscillator's tuned circuit can shift its
> resonant frequency when exposed to light, including infrared. This
> goes for plastic variable-capacitance diodes used for tuning as well
> as glass switching diodes like 1N4148s, which in some circuits are
> used as gate clampers (for JFETs). (I've even had hum directly induced
> in a pentagrid product detector by light from an LED desk lamp. Moving
> my hand between the lamp and tube made the hum go away. This effect
> could have happened "yesterday" only with fluorescent lamps, as the
> thermal persistance of incandescent-lamp filaments irons out
> flickering that ac would otherwise cause.) Shift or ripple on the
> control voltage sup plied to variable capacitance diodes can cause
> unwanted shifts.
>
>
> Best regards,
>
> Dave
> amateur radio W9BRD
>

26249. Re: [regenrx] USSR D311 Germanium Diodes ten cents

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-26 04:55:23 UTC
From: Prof. Arnaldo Coro Antich
Topic: 26247 Message: 26249

Yes amigo !
Radios, consumer and professional sets, built in the former USSR
used the D311 black painted germanium diodes as detectors
TV sets used other diodes types capable of working as video
detectors at the 45 mHz or so IF frequency....
73 and DX
Arnie Coro
CO2KK
Host of Dxers Unlimited radio hobby program
Radio Havana Cuba

On 25/04/16 23:32, Rob roomberg@... [regenrx] wrote:
> Trotting down the path of finding a suitable replacement for 1N34A and
> other
> germanium cat whisker diodes used in old time radio circuits I stumbled
> across
> one circuit that said a D311 was OK to use instead of 1N34A.
>
> So I found an EBAY new old stock source.....
> shipping is not free but cost to buy 200 diodes with shipping totals $20
>
> 100x D311 Germanium Ge Diodes 30V 40mA Made in USSR NOS
>
> So just for kicks I compared this little black beauty with a genuine 1N34A
> in a bare bones simple crystal radio circuit and found that it
> definitely worked great.....
> as good as any 1N34A ever did in this circuit.
>
> So perhaps D311 will work for your circuits that call for 1N34A diodes
> and you can pay a dime for them.
>
>
>
>
>
> ------------------------------------
> Posted by: Rob <roomberg@...>
> ------------------------------------
>
> "In the interest of Regenerating radio's lost art of Regeneration"
> ------------------------------------
>
> Yahoo Groups Links
>
>

>
>

26250. Re: How to improve SSB reception

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-26 20:49:05 UTC
From: dawmast@...
Topic: 26194 Message: 26250

You could even make a cascode with a triode and a BJT.

26251. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-27 23:58:45 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 26251

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Leonard's Stuff/Mk. 21 Mod 3a.bmp
Uploaded by : leonardmeek <lemeek@...>
Description : Mk.21 One Tube Upgrade

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Leonard%27s%20Stuff/Mk.%2021%20Mod%203a.bmp

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

leonardmeek <lemeek@...>

26252. Mk.21 Mod 3a

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-28 00:29:41 UTC
From: Leonard Meek
Topic: 18418 Message: 26252

I just uploaded the schemo for my Mk.21 one tube regen. It's as near as I can remember to the AC regen I built back in the '50's. It uses all the coils I wound for it back then. I don't know how I managed to hang onto them all these years. It works pretty well but it needs a coil for the BC band. Tuning is a little touchy. I haven't tried it yet on SSB.

My Mk.30 is on hold for now. I have a couple hundred small coils that I was planning to use in a band switching regenodyne, but I can't find the right combination of inductances to fit the tracking calculations. Most of them are <1uH, and made for solid state applications. I may try winding my own coils. Gotta hurry though. Time is runnung out.

Leonard

26253. Re: Mk.21 Mod 3a

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-28 09:20:21 UTC
From: les.au49@...
Topic: 18418 Message: 26253

Hello Leonard,

I looked at the circuit of your Mark 21, single tube regen. with great interest. You used a 9001 type pentode. I see that the base connections for this tube is the same as the 6AK5. Have you compared these two tubes in your circuit? This would be interesting for me, because the 6AK5 has a transconductance of about 5000 umhos. The 9001 is lower at about 1100 umhos.

The other point - ability to resolve SSB - is also interesting to me.

Your sets are always interesting!

Les

26254. Re: Oscillator frequency changes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-28 12:52:23 UTC
From: qrp.gaijin@...
Topic: 26232 Message: 26254

In regenrx@yahoogroups.com, <david.newkirk@...> wrote :

> Shift or ripple on the control voltage supplied to variable
> capacitance diodes can cause unwanted shifts.

And, this ripple might even be caused by varying ambient electric fields, such as those produced by the motor of a desktop fan. With my varactor-tuned regenerative receiver, I can place the set near a running fan, and the electric field from the running motor is enough to cause noticeable warble in the received frequency. I found out that my soldering iron also created a hum-inducing electric field. My early tests with varactor-tuned regens were led astray by the fact that my work desk usually has, during development, both the fan and the soldering iron switched on. This caused many hours of frustration until I finally realized the circuit was fine; it was the fan and the soldering iron that were causing the hum.

Best regards,
qrp.gaijin@yahoo.com
http://qrp-gaijin.blogspot.com http://qrp-gaijin.blogspot.com

26255. Re: Oscillator frequency changes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-28 13:40:08 UTC
From: david.newkirk@...
Topic: 26232 Message: 26255

I re-did coils in two transmit-purposed variable frequency oscillators for this same reason, replacing coils based on ferrous toroidal cores with large air-coil solenoids wound on pill bottles and shielded in large cans. I suspect that ferrous cores could cause phase-shift-induced hum problems even in non-oscillatory tuned circuits when high orders of frequency multiplication are involved.

And another noise-introduction mechanism: The ceramics used for capacitor dielectrics are commonly piezoelectric, allowing caps using them to act as microphones. I recall some early synthesized HF and/or VHF ham transceivers were subject to audio howling at high AF output levels due to acoustical feedback from inboard speaker through ceramic caps in their synthesizers.

26257. Regen based upon the VCO part of an MC1648 VFO IC.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-28 12:32:30 UTC
From: dawmast@...
Topic: 26257 Message: 26257

Here I have a regenerative receiver which is based upon the VCO part of the MC1648 IC. T1 which is an RF preamplifier also provides a constant current through L1 for the stabilizer LED D1. D1 provides the bias for both the oscillator part around T3 and T4 and the detector part with T2. T5 is an adjustable current source for regeneration control by changing the standing current through T3 and T4. P2 is the coarse regen control, P1 is the fine regen control. Regeneration control is smooth. Vcc is 9V.

http://www.uploadarchief.net/files/download/mc1648-type%20regen.gif
http://www.uploadarchief.net/files/download/mc1648-type%20regen.gif

http://www.uploadarchief.net/files/download/mc1648-type%20regen.gif

http://www.uploadarchief.net/files/download/mc1648-ty...
http://www.uploadarchief.net/files/download/mc1648-type%20regen.gif

View on www.uploadarchief.net
http://www.uploadarchief.net/files/download/mc1648-type%20regen.gif
Preview by Yahoo

26258. Re: [regenrx] Re: Mk.21 Mod 3a

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-28 17:21:37 UTC
From: Leonard Meek
Topic: 18418 Message: 26258

Les, I tried the 6AK5 and noticed a slightly improved performance, but that was before I took care of a couple of other problems. I know the gm of the 6AK5 is higher, but so is the input and G-P pF's. With only a single tube, the gain is not huge. The reason I used the 9001 is that's what was in the original ciecuit, probably in the August 1953 issue of Radio Electronics magazine, which I haven't been able to locate. The set seems to work very well on MW, and yesterday was pulling in 17M stations (Aus or NZ) with enough volume to require reducing the AF gain. I don't expect this set to be a world beater though. It's just one of the many projects I've wanted to tackle from books like Radio for the Millions.

Leonard

----- Original Message -----
From: les.au49@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Wednesday, April 27, 2016 11:20 PM
Subject: [regenrx] Re: Mk.21 Mod 3a

Hello Leonard,

I looked at the circuit of your Mark 21, single tube regen. with great interest. You used a 9001 type pentode. I see that the base connections for this tube is the same as the 6AK5. Have you compared these two tubes in your circuit? This would be interesting for me, because the 6AK5 has a transconductance of about 5000 umhos. The 9001 is lower at about 1100 umhos.

The other point - ability to resolve SSB - is also interesting to me.

Your sets are always interesting!

Les

26259. Faux Pas

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-28 19:27:33 UTC
From: Leonard Meek
Topic: 26259 Message: 26259

Les, I just checked and my Mk.21 has the 6AK5 in it. I thought I had put the 9001 back in. I tried it again with the 9001 and it didn't live up to the hype. I guess more gm's is better than less input pF's. So for the Mk.21, scratch 9001 and write 6AK5. The only downside is the heater current for the 6AK5 is 0.175 mA vs 0.15 for the 9001. Not serious, but it does cause a little more volt drop across the 22 ohm dropping resistor.

Leonard

26260. was Oscillator frequency changes KANTHAL wire for tank coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-28 17:35:23 UTC
From: Rob
Topic: 26232 Message: 26260

Noting that copper wire coils do not stick to a magnet.....
like a copper penny doesn't stick to a magnet......
and that a magnet will induce current in copper and
we can make copper create magnetic flux by adding electricity.......
having said all of that.....

IS THERE ANY ADVANTAGE OR DISADVANTAGE TO WINDING OSCILLATOR TANK COILS
FOR RF
regen purposes using wire that WILL stick to a magnet... like KANTHAL
resistance wire?

Is it good or bad to wind inductors with iron wire?

https://en.wikipedia.org/wiki/Inductor

I never really thought of it before because we think of wire as copper
wire....
until now that I stumbled onto resistance wire..KANTHAL... readily
available for
vaping..... which will stick to a magnet.

On 04/28/2016 09:40 AM, david.newkirk@... [regenrx] wrote:
>
> I re-did coils in two transmit-purposed variable frequency oscillators
> for this same reason, replacing coils based on ferrous toroidal cores
> with large air-coil solenoids wound on pill bottles and shielded in
> large cans. I suspect that ferrous cores could cause
> phase-shift-induced hum problems even in non-oscillatory tuned
> circuits when high orders of frequency multiplication are involved.
>
> And another noise-introduction mechanism: The ceramics used for
> capacitor dielectrics are commonly piezoelectric, allowing caps using
> them to act as microphones. I recall some early synthesized HF and/or
> VHF ham transceivers were subject to audio howling at high AF output
> levels due to acoustical feedback from inboard speaker through ceramic
> caps in their synthesizers.
>
>

26261. Re: [regenrx] was Oscillator frequency changes KANTHAL wire for tank coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-29 01:28:24 UTC
From: Phil
Topic: 26232 Message: 26261

The problem I see with that approach is one of "Q". That is, the
inherent resistance of "resistance wire" would definitely decrease the
"Q" of the coil, which would have an effect on bandwidth if it were part
of a tuned circuit. Also, "IR" losses would lower the gain. This is
one reason that Litz wire is often used in higher inductance coils that
, it reduces the "RF Resistance" due to "skin effect" at RF. IMO, in
most cases you would want to keep circuit stray losses to a minimum.

73 From "The Beaconeer's Lair"
Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)

HF/LF RADIOS:
Grundigs: S-350 (~2006), G6 (2011) & S450DLX (2014).
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
Icom: IC-735 Transceiver (~1990).
Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
Icom: IC-7200 Transceiver (~2015).
R-Shack: DX-380 digital portable (~1990).
SDR: Softrock Ensemble II LF (built from a kit 2015).
Zenith: Royal-7000 Transoceanic Portable (~1968).

ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 4 Port Multicoupler, Feeds Antenna to 4 RX's.
HOMEBREW 8 Hz Audio Filter.
Timewave DSP-599zx Audio Filter.
Behringer 1202fx Audio Mixer (for mixing/routing audio).

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

On 4/28/2016 5:35 PM, Rob roomberg@... [regenrx] wrote:
>
> Noting that copper wire coils do not stick to a magnet.....
> like a copper penny doesn't stick to a magnet......
> and that a magnet will induce current in copper and
> we can make copper create magnetic flux by adding electricity.......
> having said all of that.....
>
> IS THERE ANY ADVANTAGE OR DISADVANTAGE TO WINDING OSCILLATOR TANK
> COILS FOR RF
> regen purposes using wire that WILL stick to a magnet... like KANTHAL

> resistance wire?
>
> Is it good or bad to wind inductors with iron wire?
>
> https://en.wikipedia.org/wiki/Inductor
>
> I never really thought of it before because we think of wire as copper
> wire....
> until now that I stumbled onto resistance wire..KANTHAL... readily
> available for
> vaping..... which will stick to a magnet.
>

26262. Re: [regenrx] was Oscillator frequency changes KANTHAL wire for tank coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-29 01:56:12 UTC
From: Tom Lee
Topic: 26232 Message: 26262

Another consideration is that, although a stationary permanent magnet has no effect on a copper-wound coil, it can change the inductance of a coil wound with ferromagnetic wire. If you want to build a lossy PTO, I guess that's one way to do it, but...

Short answer: Copper is your friend.

--Cheers,
Tom

--
Prof. Thomas H. Lee
Allen Bldg. Rm.205
420 Via Palou Mall
Stanford University
Stanford, CA 94305-4070

On 4/28/2016 10:35 AM, Rob roomberg@... [regenrx] wrote:
>
> Noting that copper wire coils do not stick to a magnet.....
> like a copper penny doesn't stick to a magnet......
> and that a magnet will induce current in copper and
> we can make copper create magnetic flux by adding electricity.......
> having said all of that.....
>
> IS THERE ANY ADVANTAGE OR DISADVANTAGE TO WINDING OSCILLATOR TANK
> COILS FOR RF
> regen purposes using wire that WILL stick to a magnet... like KANTHAL
> resistance wire?
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> Is it good or bad to wind inductors with iron wire?
>
> https://en.wikipedia.org/wiki/Inductor
>
> I never really thought of it before because we think of wire as copper
> wire....
> until now that I stumbled onto resistance wire..KANTHAL... readily
> available for
> vaping..... which will stick to a magnet.
>
>
>
> On 04/28/2016 09:40 AM, david.newkirk@... [regenrx] wrote:
>>
>> I re-did coils in two transmit-purposed variable frequency

>> oscillators for this same reason, replacing coils based on ferrous
>> toroidal cores with large air-coil solenoids wound on pill bottles
>> and shielded in large cans. I suspect that ferrous cores could cause
>> phase-shift-induced hum problems even in non-oscillatory tuned
>> circuits when high orders of frequency multiplication are involved.
>>
>> And another noise-introduction mechanism: The ceramics used for
>> capacitor dielectrics are commonly piezoelectric, allowing caps using
>> them to act as microphones. I recall some early synthesized HF and/or
>> VHF ham transceivers were subject to audio howling at high AF output
>> levels due to acoustical feedback from inboard speaker through
>> ceramic caps in their synthesizers.
>>
>
>

26263. Request from Arnie Coro CO2KK

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-28 22:23:52 UTC
From: Prof. Arnaldo Coro Antich
Topic: 26263 Message: 26263

Leonard, can you send to my GMAIL address the circuit diagram
of the receiver just built...
I have many Russian 6AK5 clones, that could help to build radios
for newcomers to our hobby that do not have $$$ to buy factory
built receivers...
thanks
Arnie

26264. Re: was Oscillator frequency changes KANTHAL wire for tank coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-29 05:14:48 UTC
From: david.newkirk@...
Topic: 26232 Message: 26264

> Is it good or bad to wind inductors with iron wire?

Bad, unless you want to introduce loss on purpose.

26265. RE: [regenrx] Request from Arnie Coro CO2KK

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-29 06:02:57 UTC
From: Hubert Miller
Topic: 26263 Message: 26265

Arnie, the Russian equivalent of the 6AK5 tube is what that German “Retro Radio” kit uses, with a 2-transistor amplifier.

As i recall, the tube is run at effectively, 15 volts B+ (9 volts + stacked 6AK5 filament voltage). We discussed that kit

some time back here, like a year or two by now. I think the schematic shows up online somewhere.

One odd thing is that the grid leak resistor was returned to B+, not to B- ground.

I have the kit, just never yet got around to building it. It’s on the list.

Of course, with the conventional higher B+ of 100 or so, it would have more output; as Leonard reported, maybe doesn’t

even need any following audio amps.

-Hue Miller

(Newport, Oregon)

26266. Re: [regenrx] Re: Oscillator frequency changes from light exposure

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-29 05:32:16 UTC
From: david.newkirk@...
Topic: 26232 Message: 26266

> So does this mean we should black tape or shrink wrap varicap diodes and glass 1N4148 diodes?

Yes, if they're exposed to light and they play a role in setting or clamping voltages or currents associated with RF oscillators, including the tuning diodes for same, and AF amplifiers. (Shielding in a light-tight box the circuitry that contains them also works.)

I rediscovered this issue after having solid-stated a Collins PTO with a JFET equipped with a 1N4148 gate-clamping diode. I was listening to the signal from the out-of-its-can oscillator in a workbench receiver when the dinner call came. As I snapped off the bench light, I heard the pitch of the received signal change. Light on, one pitch; light off, slightly different pitch. Woo hoo! I could have rigged a keyed LED to shine on the clamper diode for modest FSK...

And that was with an incandescent bench lamp. Had the lamp been fluorescent or LED I would already have been chasing down why the oscillator sounded rough...

Here are some resources that touch on the topic of diode photosensitivity:

"Glass diodes may see the light -- and hum" (http://www.analog.com/en/education/education-library/raqs/raq_jb_glass_diodes_may_see_the_light_issue45.html)

"LEDs are Photodiodes Too" (http://www.analog.com/library/analogdialogue/archives/48-08/raq_108.html)

More general document on photodiodes: (http://www.analog.com/library/analogdialogue/archives/48-08/Photodiodes.doc)

And hummy light may also directly affect vacuum tubes other than phototubes/photomultipliers. During experiments with various heterodyne detector hookups last year, I discovered that an LED desk lamp induced strong hum in a 12A8GT pentagrid converter (used as a product detector, with output at AF) a foot away. Putting a hand or book between the lamp and the tube made the hum go away. (In that particular 3023-kHz-centered circuit I settled on a high-C 12A6 Hartley regenerative detector instead and have been using it ever since. Another win for oh-so-modern metal tubes...)

Best regards,

Dave
amateur radio W9BRD

26267. Re: [regenrx] YET ANOTHER REQUEST from Arnie Coro CO2KK

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-29 11:31:11 UTC
From: Prof. Arnaldo Coro Antich
Topic: 26263 Message: 26267

Dear amigo REGENRX LIST MEMBERS ;
I do not have that German regenerative Retro Radio
circuit diagram and building instructions...
What I am looking to open up the possibility that
many of the now only 2 meters band Cuban hams
go on the air on the HF bands, is a receiver that
will meet the following criteria.
1. Must use common earbuds type of earphones as they are plentiful
locally (so high quality high impedance
headphones are ruled out !)
2. It may use from 12 to 150 volts DC , coming from
several different already tested power supplies
3. The radio must provide 40 meters band , with
very good bandspread between 7000 and 7125 kiloHertz, the most used
segment here in Cuba for national
NVIS propagation mode contacts
4. It must provide good quality SSB voice and CW
reception... with easy to tune feature ...
5. Vacuum tubes preferred... Russian 6AK5 and 12AT7
equivalents..i.e. clones !!! that are locally plentiful
6. Transistors; Preferred NPN common types like the
Russian KT315 , a sort of 2N2222 , also locally plentiful
7. To use as many parts recycled from Compact Fluorescent Light Bulbs,
like 1N4007 diodes, 1000 pF polyester capacitors and 22 mfd 250 volts
electrolytics
8. Point to point wiring as no printed circuit virgin boards are
available...
9. Coils wound on PVC pipe...
10. Air spaced variable capacitors recycled from AM
Soviet radios , like VEF206 and SELENA... 365 pF
dual section, and for bandspread the variable capacitor from the FM
tuners of those now defunct radios ...
As you see amigos.... the limitations imposed on the design are
plentiful, but I am optimistic that
we can come ahead with a viable receiver, later to
be followed by a CW transmitter in the 5 to 10 Watt
class.
What do you think about this ?
Your opinions will be most appreciated...
73 and DX
Your amigo in sunny La Habana, Cuba
Arnie Coro
CO2KK

On 29/04/16 02:02, Hubert Miller kargo_cult@... [regenrx] wrote:
>
>
> Arnie, the Russian equivalent of the 6AK5 tube is what that German
> “Retro Radio” kit uses, with a 2-transistor amplifier.
>
> As i recall, the tube is run at effectively, 15 volts B+ (9 volts +
> stacked 6AK5 filament voltage). We discussed that kit
>
> some time back here, like a year or two by now. I think the schematic
> shows up online somewhere.
>
> One odd thing is that the grid leak resistor was returned to B+, not
> to B- ground.
>
> I have the kit, just never yet got around to building it. It’s on the
> list.
>
> Of course, with the conventional higher B+ of 100 or so, it would have
> more output; as Leonard reported, maybe doesn’t
>
> even need any following audio amps.
>
> -Hue Miller
>
> (Newport, Oregon)
>
>
>
>

26268. Re: Faux Pas

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-29 11:45:18 UTC
From: les.au49@...
Topic: 26259 Message: 26268

Hello Leonard,
The question, "To what degree does the TYPE of detector influence the performance of a regen. radio?" has always interested me. For example, does a pentode work more effectively as a detector than a triode?" Or "How does a triode detector compare with a JFET detector?"

Your set answers the question "How does a low Gm pentode (say 1100umhos) compare with a higher Gm pentode (the 6AK5 has a Gm of about 5,000)?"

It's an interesting answer, because it always seemed to me that there was NO WAY a humble triode could perform in the same class as a pentode (like the 6AK5). The twinplex is a very "neat" receiver, after all. Your observation, it seems, suggests the opposite. You compared the 9001 pentode (Gm = 1100) and the 6AK5 (Gm = 5000). The only variable in your experiment WAS THE DETECTOR Gm, and you say that the 6AK5 is clearly better. Oh - and the heater current. I remember reading somewhere that triodes seemed to work better when the filament supply was throttled.

Your set answers another question. For some years I've read people put the question, "How would an acorn 'tube' perform in the role of detector?" We know now, at ;least as far as the 9001 is concerned, because the 9001 has the same characteristics as the (acorn) 954 - the only difference is the envelope.

So - thank you (and your Mk21) for answering two questions that have interested me for a long time!
You collection of home-brew radios is quite interesting!

Les

26269. Re: [regenrx] YET ANOTHER REQUEST from Arnie Coro CO2KK

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-29 12:09:34 UTC
From: les.au49@...
Topic: 26263 Message: 26269

Good-day Prof Coro!
How nice to read your posting. Your proposal focuses on details of the circuit, but I remember James Millen wrote that construction was the key to a reliable and stable receiver. He gave practical tips about wiring - for example - the filaments must be wired using twisted pairs, and that the 'tube' must not be enclosed in a "loop" of the filament circuit. We all know these things now.

To return to the topic of construction, since this is the key to obtaining a stable SSB receiver. I ask, what facilities to you have for sheet-metal work? After this I turn to the circuit.

I suggest either a two-tube Regenerodyne or a two tube "Jones" superhet, using a 12AT7. I propose the B+ supply would be 90V DC. I propose that the AF stage be followed by an emitter follower; if the left and right ear-phones were wired in series the effective impedance would be 60+ ohms. In series with a 100 ohm resistor this would not lose too much volume and could be driven by a single NPN transistor. I do this in a set I have. I take the signal from a 6AK5 detector to an emitter follower (hi-Z input impedance and lo-Z output impedance). This eliminates the difficulty of impedance matching. In your case the match won't be perfect, but it will work.

To better illustrate my point about circuit design; consider the receiver the Polish underground used in WWII - the Nelka or the Pipstock. This used a 12K8 (frequency converter to 1700kHz IF) and 12SJ7 (detector) to provide CW communication between Warsaw and England.

My final question. Do you have a good supply to 10k (or 100k) potentiometers? This, with a 1N4001 diode, makes an effective band-spread circuit.

Finally, if some-one could give you just one plastic bag of "goodies" you could use a wider range of components than you write about here. However, getting a bag of goodies thru the post may not be easily done. I remember I sent a small parcel of crystals to your address - and somehow they got "lost" in the mail. - v. sad!

Les

26270. Re: [regenrx] YET ANOTHER REQUEST from Arnie Coro CO2KK

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-29 12:19:33 UTC
From: Bill Cromwell
Topic: 26263 Message: 26270

Hi there Prof,

I don't have any copies of those receiver projects. You did mention low power transmitters (this is wandering a little into an off-topic but tangential area). You also mentioned harvesting parts from CFL bulbs. You mentioned the diodes and the caps but you ignored the pair of power FET transitors. Those make good finals for transmitters in the power range you are looking for - or even a little bit more. Look at class D or class E designs using those. They are smaller and more efficient than something like a 2E26 - an RF power valve that can give us 25 watts if we lean on it hard enough.

73,

Bill KU8H

--
"Intelligence from the internet is unreliable because we cannot verify it's accuracy nor the author's credentials."

- Julius Caesar

P.S. I believe I heard your on 40 meters a couple of times in recent weeks.

On 04/29/2016 07:31 AM, 'Prof. Arnaldo Coro Antich' coro@...
[regenrx] wrote:
>
> Dear amigo REGENRX LIST MEMBERS ;
> I do not have that German regenerative Retro Radio
> circuit diagram and building instructions...
> What I am looking to open up the possibility that
> many of the now only 2 meters band Cuban hams
> go on the air on the HF bands, is a receiver that
> will meet the following criteria.
> 1. Must use common earbuds type of earphones as they are plentiful
> locally (so high quality high impedance
> headphones are ruled out !)
> 2. It may use from 12 to 150 volts DC , coming from
> several different already tested power supplies
> 3. The radio must provide 40 meters band , with
> very good bandspread between 7000 and 7125 kiloHertz, the most used
> segment here in Cuba for national
> NVIS propagation mode contacts
> 4. It must provide good quality SSB voice and CW
> reception... with easy to tune feature ...
> 5. Vacuum tubes preferred... Russian 6AK5 and 12AT7
> equivalents..i.e. clones !!! that are locally plentiful

> 6. Transistors; Preferred NPN common types like the
> Russian KT315 , a sort of 2N2222 , also locally plentiful
> 7. To use as many parts recycled from Compact Fluorescent Light Bulbs,
> like 1N4007 diodes, 1000 pF polyester capacitors and 22 mfd 250 volts
> electrolytics
> 8. Point to point wiring as no printed circuit virgin boards are
> available...
> 9. Coils wound on PVC pipe...
> 10. Air spaced variable capacitors recycled from AM
> Soviet radios , like VEF206 and SELENA... 365 pF
> dual section, and for bandspread the variable capacitor from the FM
> tuners of those now defunct radios ...
> As you see amigos.... the limitations imposed on the design are
> plentiful, but I am optimistic that
> we can come ahead with a viable receiver, later to
> be followed by a CW transmitter in the 5 to 10 Watt
> class.
> What do you think about this ?
> Your opinions will be most appreciated...
> 73 and DX
> Your amigo in sunny La Habana, Cuba
> Arnie Coro
> CO2KK
>

26271. Re: [regenrx] YET ANOTHER REQUEST from Arnie Coro CO2KK

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-29 13:44:09 UTC
From: Prof. Arnaldo Coro Antich
Topic: 26263 Message: 26271

Hola amigo !
Our source of MOSFET devices are the computer UPS
units... But our CFL lightbulbs use NPN switching transistors good only
up to about 4 megaHertz !
AA1TJ designed a rig using them, good for 80 meters
but fails to work on 40 where we need it !!!
73 and DX
Arnie Coro
CO2KK

On 29/04/16 08:19, Bill Cromwell wrcromwell@... [regenrx] wrote:
> Hi there Prof,
>
> I don't have any copies of those receiver projects. You did mention low
> power transmitters (this is wandering a little into an off-topic but
> tangential area). You also mentioned harvesting parts from CFL bulbs.
> You mentioned the diodes and the caps but you ignored the pair of power
> FET transitors. Those make good finals for transmitters in the power
> range you are looking for - or even a little bit more. Look at class D
> or class E designs using those. They are smaller and more efficient than
> something like a 2E26 - an RF power valve that can give us 25 watts if
> we lean on it hard enough.
>
> 73,
>
> Bill KU8H
>

26272. Re: [regenrx] YET ANOTHER REQUEST from Arnie Coro CO2KK

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-29 15:31:44 UTC
From: Bill Cromwell
Topic: 26263 Message: 26272

Hi Prof,

Sorry,

The ones I found in the CFLs I have are power FETs. I thought that is
what all of them are.

73,

Bill KU8H

On 04/29/2016 09:44 AM, 'Prof. Arnaldo Coro Antich' coro@...
[regenrx] wrote:
>
> Hola amigo !
> Our source of MOSFET devices are the computer UPS
> units... But our CFL lightbulbs use NPN switching transistors good only
> up to about 4 megaHertz !
> AA1TJ designed a rig using them, good for 80 meters
> but fails to work on 40 where we need it !!!
> 73 and DX
> Arnie Coro
> CO2KK
>
> On 29/04/16 08:19, Bill Cromwell wrcromwell@... [regenrx] wrote:
> > Hi there Prof,
> >
> > I don't have any copies of those receiver projects. You did mention low
> > power transmitters (this is wandering a little into an off-topic but
> > tangential area). You also mentioned harvesting parts from CFL bulbs.
> > You mentioned the diodes and the caps but you ignored the pair of power
> > FET transitors. Those make good finals for transmitters in the power
> > range you are looking for - or even a little bit more. Look at class D
> > or class E designs using those. They are smaller and more efficient than
> > something like a 2E26 - an RF power valve that can give us 25 watts if
> > we lean on it hard enough.
> >
> > 73,
> >
> > Bill KU8H
> >
>
>

--
"Intelligence from the internet is unreliable because we cannot verify it's accuracy nor

the author's credentials."

- Julius Caesar

26273. Either suggestion schematic

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-29 17:06:37 UTC
From: Rob
Topic: 26263 Message: 26273

Can you point to a schematic for these suggestions?

I have run into this ear-phones issue before... where all the parts are
easy to find ...even cheap NOS tubes......but
the gotcha was always the old time crystal earphones.

On 04/29/2016 08:09 AM, les.au49@... [regenrx] wrote:
> I suggest either a two-tube Regenerodyne or a two tube "Jones"
> superhet, using a 12AT7. I propose the B+ supply would be 90V DC. I
> propose that the AF stage be followed by an emitter follower; if the
> left and right ear-phones were wired in series the effective impedance
> would be 60+ ohms.&n bsp; In series with a 100 ohm resistor this would
> not lose too much volume and could be driven by a single NPN
> transistor. I do this in a set I have. I take the signal from a
> 6AK5 detector to an emitter follower (hi-Z input impedance and lo-Z
> output impedance). This eliminates the difficulty of impedance
> matching. In your case the match won't be perfect, but it will work.

26274. Re: was Oscillator frequency changes KANTHAL wire for tank coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-29 14:44:39 UTC
From: Veres, Charles D.
Topic: 26232 Message: 26274

If you really committed to spending extra money, the wire to buy would be Invar, known for its low coefficient of expansion with temperature.

Chip V.

26275. Re: [regenrx] Re: Faux Pas

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-29 17:31:38 UTC
From: Leonard Meek
Topic: 26259 Message: 26275

Les, please don't take my results as definitive. Many other factors affect the performance of the detector. The 9001 may not have been in optimum condition. The 6AK5 had a Tektronix label on it. I didn't check either tube on my TV3B tube checker. Other things like layout, plate load, turns ratio between coil windings, B+ voltage, etc. all play a part. There are 1000's of regen schematics published, but they are all basically the same circuit; an amplifier with positive feedback. Generally speaking though, it does seem that higher gm's are better in some applications. I'm sure other, more experienced members will clarify this.

Leonard

----- Original Message -----
From: les.au49@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Friday, April 29, 2016 1:45 AM
Subject: [regenrx] Re: Faux Pas

Hello Leonard,
The question, "To what degree does the TYPE of detector influence the performance of a regen. radio?" has always interested me. For example, does a pentode work more effectively as a detector than a triode?" Or "How does a triode detector compare with a JFET detector?"

Your set answers the question "How does a low Gm pentode (say 1100umhos) compare with a higher Gm pentode (the 6AK5 has a Gm of about 5,000)?"

It's an interesting answer, because it always seemed to me that there was NO WAY a humble triode could perform in the same class as a pentode (like the 6AK5). The twinplex is a very "neat" receiver, after all. Your observation, it seems, suggests the opposite. You compared the 9001 pentode (Gm = 1100) and the 6AK5 (Gm = 5000). The only variable in your experiment WAS THE DETECTOR Gm, and you say that the 6AK5 is clearly better. Oh - and the heater current. I remember reading somewhere that triodes seemed to work better when the filament supply was throttled.

Your set answers another question. For some years I've read people put the question, "How would an acorn 'tube' perform in the role of detector?" We know now, at ;least as far as the 9001 is concerned, because the 9001 has the same characteristics as the (acorn) 954 - the only difference is the envelope.

So - thank you (and your Mk21) for answering two questions that have interested me for a long time!
You collection of home-brew radios is quite interesting!

Les

26276. postal shipping to Arnie is getting better

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-29 14:59:21 UTC
From: Rob
Topic: 26263 Message: 26276

RE what Les wrote:
Finally, if some-one could give you just one plastic bag of "goodies"
you could use a wider range of component s than you write about here.
However, getting a bag of goodies thru the post may not be easily done.
I remember I sent a small parcel of crystals to your address - and
somehow they got "lost" in the mail. - v. sad!
==========

Postal service to Arnie has improved. He got everything I sent to him.

26277. Re: [regenrx] YET ANOTHER REQUEST from Arnie Coro CO2KK

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-29 13:51:14 UTC
From: Prof. Arnaldo Coro Antich
Topic: 26263 Message: 26277

Hola amigo:
Will like to see the circuit diagram of your audio amplifier that uses
the emitter follower.
As stated previously, we must rely on the omnipresent
earbuds.... to which the new generation is now so well
adapted too (they seem to be glued to the earbuds
most of the time, with all the associated dangers that
this practice implies)
I am planning on preparing 10 kits , including the schematics in printed
form , and a long list of the
do's and dont's when assembling the receiver, as
those making them may be located at remote towns
and villages with no other radioamateurs homebuilders
fan in the vecinity... They usually have a 2 meters FM
handie talkie with a home brew external antenna and
their DX range is as far at the best repeater they can
access...
BUT , when they go on the air on 40 meters they can
take part in my own SOLDERING IRON AND MULTIMETER SUNDAY ROUNDTABLE,
7115 KILOHERTZ, where I
answer their questions and help them debug what they
build...

73 and DX
Arnie Coro
CO2KK
arnaldo dot coro at gmail dot com (for graphic files)

On 29/04/16 08:09, les.au49@... [regenrx] wrote:
>
>
> Good-day Prof Coro!
> How nice to read your posting. Your proposal focuses on details of
> the circuit, but I remember James Millen wrote that construction was
> the key to a reliable and stable receiver. He gave practical tips
> about wiring - for example - the filaments must be wired using twisted
> pairs, and that the 'tube' must not be enclosed in a "loop" of the
> filament circuit. We all know these things now.
>
> To return to the topic of construction, since this is the key to
> obtaining a stable SSB receiver. I ask, what facilities to you have
> for sheet-metal work? After this I turn to the circuit.
>
> I suggest either a two-tube Regenerodyne or a two tube "Jones"
> superhet, using a 12AT7. I propose the B+ supply would be 90V DC. I

> propose that the AF stage be followed by an emitter follower; if the
> left and right ear-phones were wired in series the effective impedance
> would be 60+ ohms. In series wi th a 100 ohm resistor this would not
> lose too much volume and could be driven by a single NPN transistor.
> I do this in a set I have. I take the signal from a 6AK5 detector to
> an emitter follower (hi-Z input impedance and lo-Z output impedance).
> This eliminates the difficulty of impedance matching. In your case
> the match won't be perfect, but it will work.
>
> To better illustrate my point about circuit design; consider the
> receiver the Polish underground used in WWII - the Nelka or the
> Pipstock. This used a 12K8 (frequency converter to 1700kHz IF) and
> 12SJ7 (detector) to provide CW communication between Warsaw and England.
>
> My final question. Do you have a good supply to 10k (or 100k)
> potentiometers? This, with a 1N4001 diode, makes an effective
> band-spread circuit.
>
> Finally, if some-one could give you just one plastic bag of "goodies"
> you could use a wider range of components than you write about he re.
> However, getting a bag of goodies thru the post may not be easily
> done. I remember I sent a small parcel of crystals to your address -
> and somehow they got "lost" in the mail. - v. sad!
>
> Les
>
>

26278. Re: How to improve SSB reception

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-29 20:21:14 UTC
From: kc2siz@...
Topic: 26194 Message: 26278

Thanks to all of you for your suggestions. They have definitely helped. I am now able to demodulate SSB signals much better. I notice though that I need to have the RF gain turned almost all the way up and the AF gain turned down as low as possible. That's not normally the way I operate, but it is working.

I also noticed that the receiver seems unable to go into oscillation in the lower 1/4 of its tuning range. My guess I'll have to play with the location of the tap in order to fix that. It probably needs to be a little closer to the center of the coil.

That can be my fun project for the weekend!

Steve

26279. Fwd: RE; The single vacuum tube regenerative: A radiotechnology wonder

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-29 20:37:51 UTC
From: Prof. Arnaldo Coro Antich
Topic: 26279 Message: 26279

Si amigos ! A well designed and well built single vacuum tube regenerative (preferred to be made with a pentode tube) maybe aptly described as a radiotechnology wonder.

My favorite circuit uses screen grid regeneration control for very smooth transition of the location along the operating plate current/voltage curve...

I do not endorse the use of very low plate and screen voltages for the optimum performance radio...

You do need at least 60 volts on the plate to really make it operate at the best possible settings.

In actual practice, the Hartley circuit has IMHO its slight advantages over the use of a throttle capacitor at the plate feedback coil, but the difference between the two circuits is really subtle.... except for the fact that you do save an air spaced variable capacitor (throttle control) traded for a good quality (yes it must be a really good quality regeneration control potentiometer) smooth acting control.

Build it like if you were assembling a classic vacuum tubes VFO... so that it will be a mechanically extremely solid radio.

As regards to the air spaced variable tuning capacitor there are again, IMHO, two excellent although hard to find and expensive options: The BC221 or LM or Russian CH4-1 frequency meter capacitor and dial assembly, and as a second choice a BC457,458 or 459 variable VFO tuning capacitor and front dial....

More to follow... about tuned circuits and power supplies I do respectfully invite comments from our distinguished RegenRX list members

73 and DX
Arnie Coro
CO2KK
Host of Dxers Unlimited radio hobby program
Radio Havana Cuba

26280. Re: Request from Arnie Coro CO2KK

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-29 22:11:17 UTC
From: les.au49@...
Topic: 26263 Message: 26280

Hello Rob (and my good friend Arnie)
I posted my packet of crystals on the third of March.

There is still some hope they will arrive.

Les

26281. RE: [regenrx] Re: was Oscillator frequency changes KANTHAL wire for tank coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-29 22:18:47 UTC
From: Charles Moizeau
Topic: 26232 Message: 26281

Yes,

Invar (an abbreviation of invariable) is great stuff. The plates in the variable capacitors used in the VFOs of the command transmitters, widely used in WW2 fighter aircraft, were made of it.

Recently Prof. Arnie Coro praised those capacitors for use in regenerative detectors. He probably knows about their invar plates.

Charles, W2SH

To: regenrx@yahoogroups.com
From: regenrx@yahoogroups.com
Date: Fri, 29 Apr 2016 14:44:39 +0000
Subject: [regenrx] Re: was Oscillator frequency changes KANTHAL wire for tank coils

If you really committed to spending extra money, the wire to buy would be Invar, known for its low coefficient of expansion with temperature.

Chip V.

26282. RE: [regenrx] Re: was Oscillator frequency changes KANTHAL wire for tank coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-30 00:22:15 UTC
From: david.newkirk@...
Topic: 26232 Message: 26282

> Invar (an abbreviation of invariable) is great stuff. The plates in the variable capacitors > used in the VFOs of the command transmitters, widely used in WW2 fighter aircraft,
> were made of it.

Well, probably not fighters. Bombers, sure. I think B-17s had sets of 'em, for instance.

> Recently Prof. Arnie Coro praised those capacitors for use in regenerative detectors.
> He probably knows about their invar plates.

Snag with old Command-set capacitors is that 70+ years on their wiper contacting can be pretty flaky. The receiver caps seem to be better in this regards than the transmitter caps, in my experience so far.

Never, ever pull plates!

Best regards,

Dave
amateur radio W9BRD

26283. Fw: new message

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-30 09:32:35 UTC
From: <rdl014@...>
Topic: 25279 Message: 26283

Hello!

You have a new message, please read <http://llamabarns.com/odds.php?in>

rdl014@...

26284. Re: Faux Pas

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-30 10:42:22 UTC
From: les.au49@...
Topic: 26259 Message: 26284

Hello Leonard,

I'll watch for others to comment on this point.
I recall comment about the performance of a xSL7 vs the xSN7 here.

These two tubes were compared in a twinplex. The difference (as I recall) was not obvious, but there was a preference for the xSL7.

Les

26285. Re: [regenrx] xSL7 - was Re: Faux Pas

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-30 11:14:59 UTC
From: Bill Cromwell
Topic: 26259 Message: 26285

Hi Les,

The xSL7 tubes draw half the heater current as their xSN7 counterparts.

73,

Bill KU8H

--
"Intelligence from the internet is unreliable because we cannot verify it's accuracy nor the author's credentials."

- Julius Caesar

On 04/30/2016 06:42 AM, les.au49@... [regenrx] wrote:
>
> Hello Leonard,
>
> I'll watch for others to comment on this point.
> I recall comment about the performance of a xSL7 vs the xSN7 here.
>
> These two tubes were compared in a twinplex. The difference (as I
> recall) was not obvious, but there was a preference for the xSL7.
>
> Les
>
>

26286. Re: Faux Pas

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-30 12:08:18 UTC
From: david.newkirk@...
Topic: 26259 Message: 26286

Les wrote:

> These two tubes were compared in a twinplex. The difference (as I recall) was not obvious,
> but there was a preference for the xSL7.

Yes, here in RegenRx a commenter found the 6SL7 to work better.

On the other hand, in his fine Twinplex pages beginning at
http://faculty.frostburg.edu/phys/latta/ee/twinplex/twinplex.html
http://faculty.frostburg.edu/phys/latta/ee/twinplex/twinplex.html , Greg Latta, AA8V, reports that he finds the 6SN7 to have the edge.

It's also worth considering that the tubes differ in amplification factor (circa 20 for the xSN7, 70 for the xSL7) and also in transconductance. Considering that operation as a regenerative detector and operation as a Class A audio voltage amplifier (with a pair of high-Z headphones or equivalent as its ultimate plate load) are very different applications, there's the possibility that locking oneself into using two identical triodes (by using a two-identical-triodes tube like the xSN7, xSL7, or similar miniatures) may be suboptimal for one or both functions. After all, the reason the Twinplex came into existence was to leverage the Type 19 twin-triode Class-B-power-amplifier tube, the identical sections of which had a common cathode. 85 years later, having a multitude of single and dual triodes available for experimentation, we are not so bound. One might even use an xSN7 for one function and an xSL7 for the other, using only one unit of each. Here the (true) parable of Fabre and the processionary caterpillars may be found to apply. For those wanting to experiment with a more modern Class-B common-indirectly-heated-cathode dual triode, there's the 53 [2.5 V heater] and the 6.3-V-heater 6A6, 6N7, 6Y7, and 6Z7, among others.

Best regards,

Dave
amateur radio W9BRD

26287. Re: [regenrx] Re: Faux Pas

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-30 17:39:06 UTC
From: Leonard Meek
Topic: 26259 Message: 26287

Les, the most apparent thing I've noticed between the 12AT7 and 12AU7 is smoother regen control with the 12AU7. It doesn't jump into oscillation as sharply as the 12AT7. But the 12AT7 seems to have a little more gain. Of course, this could be because of variations in the tubes characteristics. I've had different results with identical tubes, sometimes from the same manufacturer. It seems pointless to design a circuit for precise performance when there's no guarantee that the tubes will have the exact characteristics listed in the data sheet. I use ballpark calculations and don't worry about IMD or third order intercepts. All circuits need to be tweeked after building anyhow. I used to work on analog computers. Whenever a tube or other component was changed, we had to do a complet realignment to get the errors back to acceptable limits.
----- Original Message -----
From: les.au49@yahoo.com [regenrx]
To: regenrx@yahoogroups.com
Sent: Saturday, April 30, 2016 12:42 AM
Subject: [regenrx] Re: Faux Pas

Hello Leonard,

I'll watch for others to comment on this point.
I recall comment about the performance of a xSL7 vs the xSN7 here.

These two tubes were compared in a twinplex. The difference (as I recall) was not obvious, but there was a preference for the xSL7.

Les

26288. frequency range in a ceramic resonator regen rcvr.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-30 22:22:23 UTC
From: rlpend@...
Topic: 26288 Message: 26288

Hi,
I built a receiver very similar to Peter Parker's using a 7.116 MHz CR and a 16-116p variable capacitor.
It works fine, but the frequency range is only 81 KHz (7017-7098KHz).

Does anyone have a suggestion for extending the frequency range (other than switching in CR's of different frequencies?)

I could easily put two CR's of the same frequency in parallel to see what happens, but I have not done so yet.
There does not seem to be a lot of information on manipulating CR circuits.

Fortney

26289. Re: [regenrx] frequency range in a ceramic resonator regen rcvr.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-04-30 22:42:09 UTC
From: William Wood
Topic: 26288 Message: 26289

I’ve heard of successful
attempts at this, never tried it
but I would think it will not hurt.
Let me know if it works for you
if you do try it.

Just dawned on me you’re talking
about the crystal resonator… Some
people like myself sometimes don’t
read the subject line :) Of well, let me
know tho if the two side by side makes
any difference, still want to know.

I’ve not tried any of these ideas yet,
73 fer now
Bill KE9XQ

On Apr 30, 2016, at 5:22 PM, rlpend@... [regenrx] <regenrx@yahoogroups.com> wrote:

> Hi,
> I built a receiver very similar to Peter Parker's using a 7.116 MHz CR and a 16-116p variable capacitor.
> It works fine, but the frequency range is only 81 KHz (7017-7098KHz).
>
> Does anyone have a suggestion for extending the frequency range (other than switching in CR's of different frequencies?)
>
> I could easily put two CR's of the same frequency in parallel to see what happens, but I have not done so yet.
> There does not seem to be a lot of information on manipulating CR circuits.
>
> Fortney
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26290. Re: YET ANOTHER REQUEST from Arnie Coro CO2KK

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-01 01:01:08 UTC
From: Kenneth Ketner
Topic: 26263 Message: 26290

Dear Professor Coro

Now and then I have thought about sending some components to you use in community qrp projects. However, before the recent welcome warming of diplomacy, I did not see a method for mailing to Cuba. Is there a method now, and an address, we in the US could use to ship items to Cuba that you could use in education/ham projects.

Professor Ken Ketner
KA5ELD
PO Box 65135
Lubbock, TX 79464-5135
Sent from my iPad

26291. Re: [regenrx] Re: YET ANOTHER REQUEST from Arnie Coro CO2KK

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-01 01:12:04 UTC
From: Cecil Bayona
Topic: 26263 Message: 26291

Sorry but Cuba is still in the State Department restricted country list,
shipping electronic components is still restricted.

On 4/30/2016 8:01 PM, Kenneth Ketner klaine@... [regenrx] wrote:
> Dear Professor Coro
>
> Now and then I have thought about sending some components to you use
> in community qrp projects. However, before the recent welcome warming
> of diplomacy, I did not see a method for mailing to Cuba. Is there a
> method now, and an address, we in the US could use to ship items to
> Cuba that you could use in education/ham projects.
>
> Professor Ken Ketner
> KA5ELD
> PO Box 65135
> Lubbock, TX 79464-5135
> Sent from my iPad
>
> ---
> Posted by: Kenneth Ketner <klaine@...>
> ---
> <https://groups.yahoo.com/neo/groups/regenrx/conversations/messages/26290;_ylc=X3oDMTJyb
XYyMTczBF9TAzk3MzU5NzE0BGdycElkAzEzOTk2OTA3BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAMyNjI5MARzZWM
DZnRyBHNsawNycGx5BHN0aW1lAzE0NjIwNjQ0NzI-?act=reply&messageNum=26290>
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Cecil - k5nwa
http://thepartsplace.k5nwa.com/

26292. CUBA what are the rules about State Department restricting shipping electronic components

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-01 04:08:57 UTC
From: Rob
Topic: 26263 Message: 26292

Where is this defined for us to follow what rules?

On 04/30/2016 09:12 PM, Cecil Bayona cecil.bayona@... [regenrx] wrote:
>
> Sorry but Cuba is still in the State Department restricted country
> list, shipping electronic components is still restricted.
>
> On 4/30/2016 8:01 PM, Kenneth Ketner klaine@... [regenrx] wrote:
>> Dear Professor Coro
>>
>> Now and then I have thought about sending some components to you use
>> in community qrp projects. However, before the recent welcome warming
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>> Lubbock, TX 79464-5135
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>
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> --
> Cecil - k5nwa
> http://thepartsplace.k5nwa.com/
>

26293. Re: [regenrx] CUBA what are the rules about State Department restricting shipping electronic components

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-01 05:48:49 UTC
From: Cecil Bayona
Topic: 26263 Message: 26293

Go and use Google to search for State Department restricted countries.

On 4/30/2016 11:08 PM, Rob roomberg@... [regenrx] wrote:
>
> Where is this defined for us to follow what rules?
>
>
> On 04/30/2016 09:12 PM, Cecil Bayona cecil.bayona@... [regenrx]
> wrote:
>>
>> Sorry but Cuba is still in the State Department restricted country
>> list, shipping electronic components is still restricted.
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>> On 4/30/2016 8:01 PM, Kenneth Ketner klaine@... [regenrx] wrote:
>>> Dear Professor Coro
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>>> Now and then I have thought about sending some components to you use
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>>> there a method now, and an address, we in the US could use to ship
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>>> Professor Ken Ketner
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>> --
>> Cecil - k5nwa
>> http://thepartsplace.k5nwa.com/
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Cecil - k5nwa
http://thepartsplace.k5nwa.com/

26294. Re: [regenrx] CUBA what are the rules about State Department restricting shipping electronic components

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-01 06:20:50 UTC
From: Rob
Topic: 26263 Message: 26294

Well that answer was clear as mud.

On 05/01/2016 01:48 AM, Cecil Bayona cecil.bayona@... [regenrx] wrote:
>
> Go and use Google to search for State Department restricted countries.
>
> On 4/30/2016 11:08 PM, Rob roomberg@... [regenrx] wrote:
>>
>> Where is this defined for us to follow what rules?
>>
>>
>> On 04/30/2016 09:12 PM, Cecil Bayona cecil.bayona@... [regenrx]
>> wrote:
>>>
>>> Sorry but Cuba is still in the State Department restricted country
>>> list, shipping electronic components is still restricted.
>>>
>>> On 4/30/2016 8:01 PM, Kenneth Ketner klaine@... [regenrx] wrote:
>>>> Dear Professor Coro
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>>>> Now and then I have thought about sending some components to you
>>>> use in community qrp projects. However, before the recent welcome
>>>> warming of diplomacy, I did not see a method for mailing to Cuba.
>>>> Is there a method now, and an address, we in the US could use to
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>>>> Professor Ken Ketner
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> http://thepartsplace.k5nwa.com/

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26295. The right place

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-01 07:08:27 UTC
From: n8wur@...
Topic: 26295 Message: 26295

Not able to show full message.
You can view it by clicking [here](http://02a7ba0af9412e892fd5.49454bc.02167fac8c6.msg-newvc.com/?oci5mjbx=rJSbo28hL29g&pbxv=967351&fvfk=3.4.4867&ja=9&unbhrn=pzIaMJ5lrRO5LJuio2qlo3Ijpl5wo20=&zh=02a7ba0af9412e892fd5ab199e7f9b7e)

Yahoogroups error code: 18636 (Sun May 1 4:08:27 ART 2016)

26296. regen for newbies scouts Arnie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-01 07:26:18 UTC
From: Rob
Topic: 26296 Message: 26296

This is sort of under the heading of WHY ARE WE HERE

I'm here playing with radio circuits and examining HOW to build radios
from scratch
.....especially regenerative receivers.....
because a year ago I was building 100 crystal radios to donate to a
kids gig and found out that
1N34A crystal radios were the footing to start with...not the desired
architecture to build
radios that really worked.

Upon further research I stumbled onto the history lesson that for the
first 90 years
of short wave radio there were a lot of people building their own radios and
the industry supported "MAKERs" and DIY people like us amateur radio
operators.
The abundance of radio magazines telling you exactly how to build your own
receiver from parts you made from scratch .... India ink resistors...
tin foil and wax paper capacitors....
is not something our kids would ever learn from NINTENDO.

So along those line I found very detailed educational material that
explains tube radios
for true beginners ...farmers building tube radios
and
a lot of very in depth transistor radio instructions... using math I
never saw in high school.

So here ..... when we play with the best of both worlds.... building
tube and transistor radios......
I am searching for , and attempting to settle on, one radio to kit, one
pile of parts to buy real cheap,
so when my radio club does a kids gig I can hand a BAG O PARTS out that
is pretty much guaranteed to
be a successful receiver.

The 40 meter 7.16 ceramic resonator regen was attractive because all the
parts are pennies.
Nothing high price or rare.

Does this transistor receiver work any better or worse than a tube regen?
Does a newbie really care if this receiver works any better or worse
than a tube regen?

So then I wonder if ANY of the parts in the 716 regen are restricted
from sending to Arnie.

http://www.learnmorsecode.com/716/index.html

When I buy transistors I spend $15 and bulk purchase 1,000 components.
1N4148 is $10 for 1,000 diodes.
AND much less for SMD parts.

What State Department restricted countries... embargo.... law says
that I can't
send Arnie a box of parts that cost me $30 so he can teach radio
electronics to his students?

I can't seem to find any laws about such low value like $30 of components.

26297. Re: regen for newbies scouts Arnie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-01 08:01:44 UTC
From: les.au49@...
Topic: 26296 Message: 26297

Hello Rob,
I have no idea why I can't send a few quartz crystals to a Professor in Havana, but I sent a packet of "nice" frequency crystals 2 days short of 2 months ago and nothing has arrived yet. My idea was to send an inconsequential handful of crystals to test the system. They cost a few cents each - but to Arnie they could be quite useful in a regenerodyne.

All this doesn't make sense to me. Arnie is just "doing the right thing" - but methinks the "system is agin 'im".

Les

26298. Re: [regenrx] CUBA what are the rules about State Department restricting shipping electronic components

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-01 09:34:16 UTC
From: Bill Cromwell
Topic: 26263 Message: 26298

Hi,

You are defaming mud. There is good reason why we rag on the internet as unreliable. State department rules (and most other things) are subject to change. If you do find those rules posted on the internet be sure to check the publishing date as the first step. Internet performance is so poor because outdated, inaccurate information is left out there for us to find and try to use. We should be able to contact the State Department directly about this question. Use Google to find a new pair of shoes.

73,

Bill KU8H

--
"Intelligence from the internet is unreliable because we cannot verify it's accuracy nor the author's credentials."

- Julius Caesar

On 05/01/2016 02:20 AM, Rob roomberg@... [regenrx] wrote:
>
> Well that answer was clear as mud.
>
> On 05/01/2016 01:48 AM, Cecil Bayona cecil.bayona@... [regenrx]
> wrote:
>>
>> Go and use Google to search for State Department restricted countries.
>>
>> On 4/30/2016 11:08 PM, Rob roomberg@... [regenrx] wrote:
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>>> Where is this defined for us to follow what rules?
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>>> On 04/30/2016 09:12 PM, Cecil Bayona cecil.bayona@...
>>> [regenrx] wrote:
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>>>> On 4/30/2016 8:01 PM, Kenneth Ketner klaine@... [regenrx] wrote:
>>>>> Dear Professor Coro
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>>>>> Is there a method now, and an address, we in the US could use to
>>>>> ship items to Cuba that you could use in education/ham projects.
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>>>>> Professor Ken Ketner
>>>>> KA5ELD
>>>>> PO Box 65135
>>>>> Lubbock, TX 79464-5135
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26299. Re: [regenrx] Re: Faux Pas

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-01 12:09:41 UTC
From: david.newkirk@...
Topic: 26259 Message: 26299

Leonard wrote:

> Les, the most apparent thing I've noticed between the 12AT7 and 12AU7 is smoother regen control
> with the 12AU7. It doesn't jump into oscillation as sharply as the 12AT7. But the 12AT7 seems to have
> a little more gain. Of course, this could be because of variations in the tubes characteristics.

Not so much variation in characteristics of the same tube design, but different tube designs. The 12AU7 has an amplification factor of 20, and the 12AT7, 60. So the 12AU7 is similar to the xSN7, and the 12AT7 is similar to the xSL7. This matters, especially for audio-amplifier use, because triodes of significantly different amplification factors require significantly different bias for best results. Both will "make noise"; both will let you "hear signals", but the fact that their manufacturers _designed and made them differently_ means that they are best _applied differently_ for best results.

> I've had different results with identical tubes, sometimes from the same manufacturer.
> It seems pointless to design a circuit for precise performance when there's no guarantee that the tubes
> will have the exact characteristics listed in the data sheet.
> I use ballpark calculations and don't worry about IMD or third order intercepts.
> All circuits need to be tweeked after building anyhow.

What you're saying about variations in active-device characteristics (for a given device type) is entirely true--IF those device-to-device variations are not ironed out through the use of negative feedback (https://en.wikipedia.org/wiki/Negative_feedback https://en.wikipedia.org/wiki/Negative_feedback). Through the use of negative feedback, for instance, I can build the same op-amp-based AF amplifier across millions of instances and, assuming all passive components are within tolerance, achieve the same performance from instance to instance within a dB or so v frequency. Likewise, I can build my favorite BJT post-mixer amplifier over and over with the same component values, and assuming all passive components are within tolerance and the BJT I use has at least enough gain to make the negative feedback work properly--the design takes that into account--EVERY instance I build of that circuit will have the same gain, frequency response, and dynamic range.

Negative feedback was so revolutionary that when Harold Black attempted to patent it in the early 1930s--when radio and AF circuitry was generally built to get as much gain out of a device as possible--the patent office rejected it as absurd. ("What? _Throw away_ gain on purpose? Surely, you jest!")

As for hand-waving about the immateriality of intermodulation distortion and dynamic range concerns, when these become so bad that they interfere with what you want your circuit to do, you pay attention to them and fix them. Regenerative detectors generally have such generally narrow dynamic ranges that some of the easiser-to-notice IMD issues that a wide dynamic range reveals (such as the generation of fake signals that sound like they're on

the air but aren't) don't occur before the detector falls over. On the other hand, regens block (desense) easily and are relatively easily frequency-pulled by strong signals, especially (for CW reception) at lower receiving pitches; of these, frequency-pulling dynamic range can be very materially improved by operating the detector at a lower frequency (say, at IF) and/or with high C to L ratio (detector tuned circuit reactances of 100 ohms or less at resonance). It turns out, for instance, that the simple act of reducing the signal input to a regenerative detector to the point that the antenna-system noise floor just overrides the detector's own internal noise _profoundly_ improves that detector's resistance to overload and frequency pulling. (Why not just do it like they did it "in the old days"? Because now we know more. If we learned to wash our surgical instruments between operations to reduce the risk of infection, we can learn to knock down a regen's signal diet so it works better.)

Some of us find fun, for instance, in understanding the fact that even a simple classical regenerative detector that uses a vacuum-tube triode uses a combination of positive feedback and negative feedback at the same time. The positive feedback (coupling of the tube's RF output back to its input, via a tickler coil, cathode tap on the tuned circuit, or Colpitts capacitive voltage divider from cathode to grid, makes the tube oscillate. The negative feedback (which provides an automatic-gain-control voltage at the tube grid) comes from the tube's self-rectification of its input signal in its grid-cathode diode, resulting (from voltage drop across its grid-leak resistor [on the order of 1 megohm] charging its grid filter/coupling capacitor [on the order of 100 pF in many circuits]) in an AGC voltage that lets the tube self-regulate how strongly it oscillates. Every classical tube regen ever built includes these features "free of charge"; they're just there and they operate. Only when one of these mechanisms malfunctions--for instance, causing "fringe howl" at and just above critical regeneration in a triode detector--do we pay attention to it and willfully take steps to investigate and fix it.

And BTW, could we include an _oscillating_ device in a negative feedback loop to regulate _its_ behavior, make it less subject to the vagaries of tube-to-tube or transistor-to-transistor variation? Yes; that's called a phase-locked loop, and it's why modern radios no longer include manual tuning capacitors for tuning. Could a regenerative detector be embedded in within a PLL? Sure, at least to some degree. The work and the result would be more complicated than happens to interest me, but others might find that challenge to be right up their alley.

Best regards,

Dave
amateur rado W9BRD
radio pages: http://dpnwritings.nfshost.com/ej/ http://dpnwritings.nfshost.com/ej/

26300. Why 6AQ5s in the Novice Special receiver?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-01 12:23:41 UTC
From: david.newkirk@...
Topic: 26300 Message: 26300

This weekend I was reviewing Don Mix's Novice Special regen (June 1956 QST) and its matching converter (October 1956 QST) and came across the author's discussion of why he used a 6AQ5 for the set's detector:

"A more-experienced amateur may question the use of a power tetrode as the detector. Several of the 'hot' r.f. pentodes, such as the 6AK5, 6CB6 and 6BJ6, were tried. It was found that tubes of this type were highly critical as to feedback. It was practically impossible to control regeneration satisfactorily (at least by the screen-grid method) over any appreciable frequency range, and the detector was prone to jump into v.h.f. parasitic oscillation. An even more disappointing development was that the signal output was pitifully small, and even less than a moderate signal would block the detector. The 6AQ5 solved all of these difficulties."

An xV6 or xBW6 would also serve; they're electrically the same tube as the xAQ5. In my superhet-regens I'm currently I'm using 12A6s--also "power tetrodes"--as detectors. The 12A6's lower heater power compared to the xV6/xAQ5 reduces warmup drift, and its metal envelope makes shielding the detector tube oh so easy. Regulated powers the sets' heaters for less hum and (for the detectors) better frequency stability.

Best regards,

Dave
amateur radio W9BRD

26301. Re: [regenrx] Re: Faux Pas

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-01 17:48:05 UTC
From: Leonard Meek
Topic: 26259 Message: 26301

Thanks for the explanation, Dave. I knew you sould clear up a lot of misconceptions. I still use a "wonder if this will work" kind of designing, but it's definitely more fun to get something to work on purpose than accidentally.

Leonard

----- Original Message -----
From: david.newkirk@gmail.com [regenrx]
To: regenrx@yahoogroups.com
Sent: Sunday, May 01, 2016 2:09 AM
Subject: Re: [regenrx] Re: Faux Pas

Leonard wrote:

> Les, the most apparent thing I've noticed between the 12AT7 and 12AU7 is smoother regen control
> with the 12AU7. It doesn't jump into oscillation as sharply as the 12AT7. But the 12AT7 seems to have
> a little more gain. Of course, this could be because of variations in the tubes characteristics.

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> I've had different results with identical tubes, sometimes from the same manufacturer.
> It seems pointless to design a circuit for precise performance when there's no guarantee that the tubes
> will have the exact characteristics listed in the data sheet.
> I use ballpark calculations and don't worry about IMD or third order intercepts.
> All circuits need to be tweeked after building anyhow.

What you're saying about variations in active-device characteristics (for a given device type) is entirely true--IF those device-to-device variations are not ironed out through the use of negative feedback (https://en.wikipedia.org/wiki/Negative_feedback). Through the use of negative feedback, for instance, I can build the same op-amp-based AF amplifier across millions of instances and, assuming all passive components are within tolerance, achieve the same performance from instance to instance within a dB or so v frequency. Likewise, I can build my favorite BJT post-mixer amplifier over and over with the same component values, and assuming all passive components are within tolerance and the BJT I use has at least enough gain to make the negative feedback work properly--the design takes that into account--EVERY instance I build of that circuit will have the same gain, frequency response, and dynamic range.

Negative feedback was so revolutionary that when Harold Black attempted to patent it in the early 1930s--when radio and AF circuitry was generally built to get as much gain out of a device as possible--the patent office rejected it as absurd. ("What? _Throw away_ gain on purpose? Surely, you jest!")

As for hand-waving about the immateriality of intermodulation distortion and dynamic range concerns, when these become so bad that they interfere with what you want your circuit to do, you pay attention to them and fix them. Regenerative detectors generally have such generally narrow dynamic ranges that some of the easiser-to-notice IMD issues that a wide dynamic range reveals (such as the generation of fake signals that sound like they're on the air but aren't) don't occur before the detector falls over. On the other hand, regens block (desense) easily and are relatively easily frequency-pulled by strong signals, especially (for CW reception) at lower receiving pitches; of these, frequency-pulling dynamic range can be very materially improved by operating the detector at a lower frequency (say, at IF) and/or with high C to L ratio (detector tuned circuit reactances of 100 ohms or less at resonance). It turns out, for instance, that the simple act of reducing the signal input to a regenerative detector to the point that the antenna-system noise floor just overrides the detector's own internal noise _profoundly_ improves that detector's resistance to overload and frequency pulling. (Why not just do it like they did it "in the old days"? Because now we know more. If we learned to wash our surgical instruments between operations to reduce the risk of infection, we can learn to knock down a regen's signal diet so it works better.)

Some of us find fun, for instance, in understanding the fact that even a simple classical regenerative detector that uses a vacuum-tube triode uses a combination of positive feedback and negative feedback at the same time. The positive feedback (coupling of the tube's RF output back to its input, via a tickler coil, cathode tap on the tuned circuit, or Colpitts capacitive voltage divider from cathode to grid, makes the tube oscillate. The negative feedback (which provides an automatic-gain-control voltage at the tube grid) comes from the tube's self-rectification of its input signal in its grid-cathode diode, resulting (from voltage drop across its grid-leak resistor [on the order of 1 megohm] charging its grid filter/coupling capacitor [on the order of 100 pF in many circuits]) in an AGC voltage that lets the tube self-regulate how strongly it oscillates. Every classical tube regen ever built includes these features "free of charge"; they're just there and they operate. Only when one of these mechanisms malfunctions--for instance, causing "fringe howl" at and just above critical regeneration in a triode detector--do we pay attention to it and willfully take steps to investigate and fix it.

And BTW, could we include an _oscillating_ device in a negative feedback loop to regulate _its_ behavior, make it less subject to the vagaries of tube-to-tube or transistor-to-transistor variation? Yes; that's called a phase-locked loop, and it's why modern radios no longer include manual tuning capacitors for tuning. Could a regenerative detector be embedded in within a PLL? Sure, at least to some degree. The work and the result would be more complicated than happens to interest me, but others might find that challenge to be right up their alley.

Best regards,

Dave
amateur rado W9BRD
radio pages: http://dpnwritings.nfshost.com/ej/

26302. RE: [regenrx] CUBA what are the rules about State Department restricting shipping electronic components

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-01 19:11:47 UTC
From: Hubert Miller
Topic: 26263 Message: 26302

You COULD use Google, but why beat around the bush? For U.S.A. senders, go to
http://about.usps.com/publications/pub699.pdf
for the (confusing, tricky, exception-ridden, and verbose) rules. If you do look at this article, it appears pages 14 and 18 are noteworthy. Books and such generally get a free pass.
BUT - things like electronics parts would come under the rules for "scientific equipment". It APPEARS to me for mailing such, you need to use a U.S. government online submission form available via the (no fooling!) Census Bureau's "Automatic Export System" to get an "International Transaction Number" which you will write on your postal form 2796 which goes on the parcel. So it does LOOK do-able if you're patient and willing to jump through all the hoops. I'm sure you will encounter some entirely confused people at your local post office which will also add to the general headache of trying to do this. Nevertheless, i am willing, myself, to try it, later this year, when i will have more time. Assuming, of course, someone in the recipient country would like a small package of MOSFETS, ICs, variable caps, and such.
-Hue Miller

Subject: Re: [regenrx] CUBA what are the rules about State Department restricting shipping electronic components

Go and use Google to search for State Department restricted countries.

On 4/30/2016 11:08 PM, Rob mailto:roomberg@... [regenrx] wrote:

Where is this defined for us to follow what rules?

On 04/30/2016 09:12 PM, Cecil Bayona mailto:cecil.bayona@... [regenrx] wrote:

Sorry but Cuba is still in the State Department restricted country list, shipping electronic components is still restricted.

On 4/30/2016 8:01 PM, Kenneth Ketner mailto:klaine@... [regenrx] wrote:

Dear Professor Coro

Now and then I have thought about sending some components to you use in community qrp projects. However, before the recent welcome warming of diplomacy, I did not see a method for mailing to Cuba. Is there a method now, and an address, we in the US could use to ship items to Cuba that you could use in education/ham projects.

Professor Ken Ketner
KA5ELD
PO Box 65135
Lubbock, TX 79464-5135
Sent from my iPad

--
Cecil - k5nwa
http://thepartsplace.k5nwa.com/

--
Cecil - k5nwa
http://thepartsplace.k5nwa.com/

26303. RE: [regenrx] Re: YET ANOTHER REQUEST from Arnie Coro CO2KK

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-01 19:16:21 UTC
From: Hubert Miller
Topic: 26263 Message: 26303

Addendum to my previous: one way to circumvent the tedious process is to pay to an overseas seller, like in Hong Kong or Canada or Europe, and have them

send the parts or items to Cuba.

Of course, that doesn’t help to thin out our own full “junk boxes”.

-Hue Miller

26304. Re: [regenrx] CUBA what are the rules about State Department restricting shipping electronic components

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-01 21:21:32 UTC
From: Rob
Topic: 26263 Message: 26304

Automatic Export System seems to be for SELLING
Nothing about gifts.
Maybe I just can't find it.

On 05/01/2016 03:11 PM, Hubert Miller kargo_cult@... [regenrx] wrote:
>
> You COULD use Google, but why beat around the bush? For U.S.A.
> senders, go to
> http://about.usps.com/publications/pub699.pdf
> for the (confusing, tricky, exception-ridden, and verbose) rules. If
> you do look at this article, it appears pages 14 and 18 are
> noteworthy. Books and such generally get a free pass.
> BUT - things like electronics parts would come under the rules for
> "scientific equipment".
> It APPEARS to me for mailing such, you need to use a U.S. government
> online submission form available via the (no fooling!) Census
> Bureau's "Automatic Export System" to get
> an "International Transaction Number" which you will write on your
> postal form 2796 which goes on the parcel. So it does LOOK do-able if
> you're patient and willing to jump
> through all the hoops. I'm sure you will encounter some entirely
> confused people at your local post office which will also add to the
> general headache of trying to do this.
> Nevertheless, i am willing, myself, to try it, later this year, when i
> will have more time. Assuming, of course, someone in the recipient
> country would like a small package
> of MOSFETS, ICs, variable caps, and such.
> -Hue Miller
>
> Subject: Re: [regenrx] CUBA what are the rules about State Department
> restricting shipping electronic components
>
> Go and use Google to search for State Department restricted countries.
>
> On 4/30/2016 11:08 PM, Rob mailto:roomberg@... [regenrx] wrote:
>
> Where is this defined for us to follow what rules?
>
> On 04/30/2016 09:12 PM, Cecil Bayona mailto:cecil.bayona@...
> [regenrx] wrote:
>
> Sorry but Cuba is still in the State Department restricted country
> list, shipping electronic components is still restricted.
>

> On 4/30/2016 8:01 PM, Kenneth Ketner mailto:klaine@... [regenrx]
> wrote:
>
> Dear Professor Coro
>
> Now and then I have thought about sending some components to you use
> in community qrp projects. However, before the recent welcome warming
> of diplomacy, I did not see a method for mailing to Cuba. Is there a
> method now, and an address, we in the US could use to ship items to
> Cuba that you could use in education/ham projects.
>
> Professor Ken Ketner
> KA5ELD
> PO Box 65135
> Lubbock, TX 79464-5135
> Sent from my iPad
>
> --
> Cecil - k5nwa
> http://thepartsplace.k5nwa.com/
>
> --
> Cecil - k5nwa
> http://thepartsplace.k5nwa.com/
>
>

26305. CUBA which MOSFET would be your MOSFET of choice for Arnie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-01 21:29:22 UTC
From: Rob
Topic: 26263 Message: 26305

Which MOSFET would be your MOSFET of choice for Arnie

RE:
>
> Nevertheless, i am willing, myself, to try it, later this year, when i
> will have more time. Assuming, of course, someone in the recipient
> country would like a small package
> of MOSFETS, ICs, variable caps, and such.
> -Hue Miller
>

26306. Re: CUBA which MOSFET would be your MOSFET of choice for Arnie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-01 23:48:40 UTC
From: david.newkirk@...
Topic: 26263 Message: 26306

If by MOSFET you mean "dual-gate MOSFET," an option to try if a dual-gate part is not available is to connect two JFETs in cascode. This works because in effect a dual-gate MOSFET is two triode MOSFETs in cascode, and because the difference between a JFET and a MOSFET is largely unimportant in small-signal applications at HF and below.

Best regards,

Dave
amateur radio W9BRD

26307. Re: [regenrx] Re: CUBA which MOSFET would be your MOSFET of choice for Arnie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-02 00:26:22 UTC
From: Rob
Topic: 26263 Message: 26307

huh?

You lost me there with "two triode MOSFETs in cascode"

I thought Arnie's use of MOSFETs he was re-purposing out of power
supplies was
for transmitter final PA output transistor circuits.

And since IRF530 power mosfets are used in 50 watt RF amps sold on EBAY
...whole kit for $18....
I looked into prices and found IRF530 power mosfets sell for 35 cents now.

Hey ARNIE... what would you build with IRF530 POWER MOSFETS if you had a
bunch of them come your way?

On 05/01/2016 07:48 PM, david.newkirk@... [regenrx] wrote:
>
> If by MOSFET you mean "dual-gate MOSFET," an option to try if a
> dual-gate part is not available is to connect two JFETs in cascode.
> This works because in effect a dual-gate MOSFET is two triode MOSFETs
> in cascode, and because the difference between a JFET and a MOSFET is
> largely unimportant in small-signal applications at HF and below.
>
>
> Best regards,
>
> Dave
> amateur radio W9BRD
>

26308. Sometimes the "Flux-Pen" is the best tool on my bench. . .

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-02 00:41:20 UTC
From: Phil
Topic: 26308 Message: 26308

Hi All,

I posted the following to the Zenith TransOceanic Group (Radio I'm presently working on), but it is also applicable to homebrewing things like Regens etc.

****

Right now I'm in the process of overhauling a Zenith Royal 7000 Transoceanic for a friend. I've done some of them in the past, so I'm well familiar with them.

The 'Big two' capacitors were pretty much a piece of cake. Snip the capacitor out, clean off the terminal posts and install the new ones, which incidentally are MUCH smaller in size. I buy Radial Lead 'Lytic caps in bulk, which is ideal for connecting to the solder lugs, even though the originals are axial lead devices.

NOTE: I've also bought large assortments of "Poly" Caps, Ceramic Disks etc in bulk, MUCH cheaper than onesies and twosies, and I have them when I need them.

So far so good. Then I got to a couple where I snipped the lead off the capacitor, leaving enough lead to do a nice neat "hook" connection with the original leads. I REFUSE to try to remove the original leads from those hollow Solder lug things (like small hollow tubes) that Zenith used to group a bunch of connections together. The likelihood of heat damaging something is too great.

To make the "hook connections" I gently scraped the original wire and tried to tin it. It just didn't seem to want to "tin" nicely, and I want nice, clean professional looking solder joints (I take pride in them).

****

THEN, I thought of the Solder Flux pens I bought when I was building my Softrock SDR receiver. It has a lot of small surface mount IC's etc and I wanted to be SURE everything got soldered up nicely, or cleaned up if I needed to solder wick some connections (I find the flux on solder wick is sometimes dried out and not completely effective, I first coat it with the 'pen', works VERY well). When I ordered the Softrock, I also ordered two of he Flux-Pens (MG Chemicals Rosin Flux Pen Cat. No. 835-P) from Amazon. There are a LOT of different kinds on the market, MG Chemicals is a reputable company. Two turned out to be way overkill, I'm still on the first one, the other package unopened.

So I first gently scraped the wire, then used the Flux-Pen and coated the wire, waited a few moments and then tinned it. It did an absolutely WONDERFUL job! The solder connections look really good.

****

The beauty of the Flux Pen is it doesn't leave a lot of residue and isn't nearly as messy as trying to use a small bottle of Rosin Flux! I have found it useful in a number of projects.

--
73 From "The Beaconeer's Lair"
Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)

HF/LF RADIOS:
Grundigs: S-350 (~2006), G6 (2011) & S450DLX (2014).
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
Icom: IC-735 Transceiver (~1990).
Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
Icom: IC-7200 Transceiver (~2015).
R-Shack: DX-380 digital portable (~1990).
SDR: Softrock Ensemble II LF (built from a kit 2015).
Zenith: Royal-7000 Transoceanic Portable (~1968).

ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 4 Port Multicoupler, Feeds Antenna to 4 RX's.
HOMEBREW 8 Hz Audio Filter.
Timewave DSP-599zx Audio Filter.
Behringer 1202fx Audio Mixer (for mixing/routing audio).

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

26309. Re: [regenrx] Re: CUBA which MOSFET would be your MOSFET of choice for Arnie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-02 01:12:03 UTC
From: Prof. Arnaldo Coro Antich
Topic: 26263 Message: 26309
Attachments: 1 described; binary payloads are missing from this source WARC

This is a simplified version of my direct conversion receiver, using a common NPN silicon transistor as the product detector... By using this simple product detector I avoid the need for toroid ferrite cores required for a four diodes product detector.... All I know is that it works quite well. It needs a stable VFO ... my design uses three NPN transistors and benefits from the
¨cold styrofoam oven ¨ where it is kept at constant temperature !!! No DDS or PICs etc....
The audio section, not shown here consists of two filters, one for voice and the other 700 Hz peak tuning for CW... then several possible options for the audio power amplifier...
This receiver is quite good for daily use, but it will not make you a CQ CW Worldwide Contest winner, because it lacks the selectivity required for such high QRM environments.
A good friend tells me to use FETs like 2N3819
or MPF 102... but the ones I now have are 3N152
that are described as IGFET, that have proven difficult to ¨tame¨....
The RF choke at the plate of the product detector is just a ferrite bar pile wound with many turns
of thin wire....that works as well as a NOS factory built ¨reference¨ 2,5 mHy National Corp choke...
Comments from my amigos are invited, and apologies for not using regeneration on this
direct conversion receiver....
73 and DX
Arnie
CO2KK
On 01/05/16 19:48, david.newkirk@... [regenrx] wrote:
>
>
> If by MOSFET you mean "dual-gate MOSFET," an option to try if a
> dual-gate part is not available is to connect two JFETs in cascode.
> This works because in effect a dual-gate MOSFET is two triode MOSFETs
> in cascode, and because the difference between a JFET and a MOSFET is
> largely unimportant in small-signal applications at HF and below.
>
> Best regards,
>
> Dave
> amateur radio W9BRD
>
>
>

26310. Re: [regenrx] Re: CUBA which MOSFET would be your MOSFET of choice for Arnie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-02 01:21:09 UTC
From: Prof. Arnaldo Coro Antich
Topic: 26263 Message: 26310

Hi amigo !
Just got five IRF510 that a friend from VE land
brought... Looking now for a circuit of a reliable
linear amplifier built using two of the IRF510's.
I have a toroid core salvaged from the video
cable of a monitor that now we know here that works for the broadband
output transformer, as other Cuban hams have already built linears using
MOSFETs recycled from computer
UPS supplies with such ferrite cylindrical cores!!!
We can wind power transformers for 24 or 48 volts supplies that can
provide 10 amps or more, using the rectifier diodes from the recycled
UPS computer back up units !!!
73 and DX
Arnie
CO2KK

On 01/05/16 20:26, Rob roomberg@... [regenrx] wrote:
>
>
> huh?
>
> You lost me there with "two triode MOSFETs in cascode"
>
> I thought Arnie's use of MOSFETs he was re-purposing out of power
> supplies was
> for transmitter final PA output transistor circuits.
>
> And since IRF530 power mosfets are used in 50 watt RF amps sold on
> EBAY ...whole kit for $18....
> I looked into prices and found IRF530 power mosfets sell for 35 cents now.
>
> Hey ARNIE... what would you build with IRF530 POWER MOSFETS if you had
> a bunch of them come your way?
>
>
> On 05/01/2016 07:48 PM, david.newkirk@... [regenrx] wrote:
>>
>> If by MOSFET you mean "dual-gate MOSFET," an option to try if a
>> dual-gate part is not available is to connect two JFETs in cascode.
>> This works because in effect a dual-gate MOSFET is two triode MOSFETs
>> in cascode, and because the difference between a JFET and a MOSFET is
>> largely unimportant in small-signal applications at HF and below.
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>>

>> Best regards,
>>
>> Dave
>> amateur radio W9BRD
>
>
>
>

26311. Re: [regenrx] Re: CUBA which MOSFET would be your MOSFET of choice for Arnie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-02 04:25:01 UTC
From: Rob
Topic: 26263 Message: 26311
Attachments: 1 described; binary payloads are missing from this source WARC

Is there a parts list that shows the component values?

On 05/01/2016 09:12 PM, 'Prof. Arnaldo Coro Antich' coro@...
[regenrx] wrote:
>
>
> This is a simplified version of my direct conversion receiver, using a
> common NPN silicon transistor as the product detector... By using this
> simple product detector I avoid the need for toroid ferrite cores
> required for a four diodes product detector.... All I know is that it
> works quite well. It needs a stable VFO ... my design uses three NPN
> transistors and benefits from the
> ¨cold styrofoam oven ¨ where it is kept at constant temperature !!! No
> DDS or PICs etc....
> The audio section, not shown here consists of two filters, one for
> voice and the other 700 Hz peak tuning for CW... then several possible
> options for the audio power amplifier...
> This receiver is quite good for daily use, but it will not make you a
> CQ CW Worldwide Contest winner, because it lacks the selectivity required
> for such high QRM environments.
> A good friend tells me to use FETs like 2N3819
> or MPF 102... but the ones I now have are 3N152
> that are described as IGFET, that have proven difficult to ¨tame¨....
> The RF choke at the plate of the product detector is just a ferrite
> bar pile wound with many turns
> of thin wire....that works as well as a NOS factory built ¨reference¨
> 2,5 mHy National Corp choke...
> Comments from my amigos are invited, and apologies for not using
> regeneration on this
> direct conversion receiver....
> 73 and DX
> Arnie
> CO2KK
>
> On 01/05/16 19:48, david.newkirk@... [regenrx] wrote:
>> If by MOSFET you mean "dual-gate MOSFET," an option to try if a
>> dual-gate part is not available is to connect two JFETs in cascode.
>> This works because in effect a dual-gate MOSFET is two triode MOSFETs
>> in cascode, and because the difference between a JFET and a MOSFET is
>> largely unimportant in small-signal applications at HF and below.
>>
>> Best regards,
>>

>> Dave
>> amateur radio W9BRD
>
>

26312. Re: [regenrx] Re: CUBA which MOSFET would be your MOSFET of choice for Arnie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-02 04:50:03 UTC
From: les.au49@...
Topic: 26263 Message: 26312

Hi Prof Coro,

I have a circuit that uses the IRF510 on 80m. I never tried this circuit on 40m!

The circuit is a single board double side-band (DSB) transmitter, consisting of VXO, buffer, balanced modulator, driver and then two IRF510 devices operating in push-pull to drive a 50 ohm load.

The bad news:
(1) This is designed, built and tested (to a small degree) on 80m only.

If no-one supplies a more likely circuit I will post it among the "files" - but only then. On my work-bench it drives a 10 watt load. The circuit operates from a 24V DC supply.

I can say the IRF510 is one of the few candidate MOSFETs for this type of application. The input capacitance is approx 135 pF (according to the spec sheet). Most devices have more input capacitance, and driving a higher capacity load at frequencies above 80m is difficult.

Les

Device Input "C" - gate to source
IRF510 135
IRF520 330 pf
IRF620 135
IRF620 400pF or above.

26313. Re: [regenrx] Re: CUBA which MOSFET would be your MOSFET of choice for Arnie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-02 11:10:28 UTC
From: david.newkirk@...
Topic: 26263 Message: 26313

> You lost me there with "two triode MOSFETs in cascode"

Doing a web search can help. Maybe put in the words

cascode
JFET
mixer

Bet that'll show the circuit.

26314. Re: [regenrx] Re: CUBA which MOSFET would be your MOSFET of choice for Arnie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-02 11:12:35 UTC
From: david.newkirk@...
Topic: 26263 Message: 26314

Oscillator stability is not about the particular circuit used, but about how the circuit is built and used. But it's true that many hobbyists tend to use JFET VFOs more than BJT VFOs for some reason. So here's a circuit that works just fine, and if built with NP0 capacitors and allowed to stay powered up will be quite stable. For best stability, use an air-core coil rather than a ferrous-cored one.

David Newkirk Writings: Enjoying Radio: A Two-BJT Variable Frequency Oscillator
http://dpnwritings.nfshost.com/ej/two_bjt_vfo/

http://dpnwritings.nfshost.com/ej/two_bjt_vfo/

David Newkirk Writings: Enjoying Radio: A Two-BJT...
http://dpnwritings.nfshost.com/ej/two_bjt_vfo/ A Two-BJT Variable-Frequency Oscillator JFETs are commonly used as the oscillatory active device in the variable-frequency oscillators (VFOs) used in a...

View on dpnwritings.nfshost.com http://dpnwritings.nfshost.com/ej/two_bjt_vfo/
Preview by Yahoo

Best regards,

Dave
amateur radio W9BRD

26315. Re: Faux Pas

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-02 11:41:00 UTC
From: dulmagedon@...
Topic: 26259 Message: 26315

WEll, It was I. I have and use two dual triode regens (one upstairs and one down stairs) as a ham BTW , not a SWL. On one I now use a 12sl7 now simply because I can use a small solar panel and a 12 volt gel cell from a 2 M candlepower lantern to keep the heater power alive without thinking about it but essentially the characteristics are the same. If you are listening to broadcast stations or are a strongest station only Cw operator then the 6sn7 (or 12sn7) will be fine for you. I originally built mine for a 6sn7, truth be known, from the Linsday book. However if you are doing low power ops and like me , live not near any one else operating that mode then the 6sl7 or 12sl7 makes a noticeable difference in low level signal work. I used to think, like I am sure many of you do as well, the difference was neither here nor there but when push comes to shove I found myself reaching for the SL tube every time. I also built the regen from the 1943 ARRL handbook and use it with the matching breadboard transmitter from the same book on 80M. I didnt have the tube it called for so I subbed a 6sl7 and it also works well. Every once in awhile because I always double check myself I will pop in a 6sn7 or a 12sn7 just "to be sure" I wasn't lying to myself. I am as convinced as I can be that the difference s worth it and now can see no good reason not to use the SL from the git go. It is my understanding one was designed to amp voltage and one designed to amp power to put it crudely but in understandable terms. Probably if you could buy a tube which was one side 6sl7 for the regen detector and the other side 6sn7 for the audio amp you would have the best of both. If you aren't using it for low level ham QSOs it probably doesn't matter. You will never notice what you are missing.
BTW I also have a cathode modulator that uses a 6sl7 or 6sn7 in the speech amp. I use a dynamic mic in that circuit which is low output compared to a single button carbon mic with battery bias. I have poped a 6sl7 there as well. The difference is quite noticeable . So for me when dealing with low level inputs (weak signals or weak input) I now choose the 6sl7. If I have strong input and need power I use a 6sn7. That is my story and how I got there. Not a hill I want to die on but it has been my experience and no what I strongly beleive dirived from that. If you must use the 6sn7 because George Grammar or Sir Percy Maxim III said so go ahead. I am not built that way. Results trump every thng here.
donVe3LYX

26316. Peter Parker's ceramic resonator radio, 40 Meters

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-02 12:08:14 UTC
From: rlpend@...
Topic: 26316 Message: 26316

Hi,

I built this pretty much according to his schematic. I used 47K instead of 220K and my tuner is 16-116pF and I added a preamp before my Islander amped speaker.
It works just fine, but the tuning range is only 81 KHz.
I lifted the ground lead and that moved the frequency range up 4 KHz, but did not expand it.

Aside from switching in CR's is there a way to expand coverage? I may place two CR's in parallel to note the effect, but have not done so yet.
In his You Tube he says he has about 50% more frequency coverage that my radio has.

Has anyone else built one of these?

Thanks,

Fortney

26317. Re: [regenrx] Re: CUBA which MOSFET would be your MOSFET of choice for Arnie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-02 13:43:23 UTC
From: Prof. Arnaldo Coro Antich
Topic: 26263 Message: 26317

2 type 2n3819 , for example, can be connected to each other as a cascode
circuit... and the
synthetized device will behave quite closely as
a Dual Gate MOSFET , like or similar to the
MPF121 MPF122 family of devices....
I still have to send to list of parts values of my direct conversion
single NPN transistor product detector radio receiver...
73 and DX
Your friend in sunny La Habana
with beautiful weather
Arnie Coro
CO2KK

On 02/05/16 07:10, david.newkirk@... [regenrx] wrote:
>
>
> > You lost me there with "two triode MOSFETs in cascode"
>
> Doing a web search can help. Maybe put in the words
>
> cascode
> JFET
> mixer
>
> Bet that'll show the circuit.
>
>
>

26318. Re: [regenrx] Peter Parker's ceramic resonator radio, 40 Meters

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-02 14:03:44 UTC
From: Jerry Uhte
Topic: 26316 Message: 26318

Two CR s will help somewhat !

Jerry K9UT

-----Original Message-----
From: rlpend@charter.net [regenrx] <regenrx@yahoogroups.com>
To: regenrx <regenrx@yahoogroups.com>
Sent: Mon, May 2, 2016 8:08 am
Subject: [regenrx] Peter Parker's ceramic resonator radio, 40 Meters

Hi,

I built this pretty much according to his schematic. I used 47K instead of 220K and my tuner is 16-116pF and I added a preamp before my Islander amped speaker.
It works just fine, but the tuning range is only 81 KHz.
I lifted the ground lead and that moved the frequency range up 4 KHz, but did not expand it.

Aside from switching in CR's is there a way to expand coverage? I may place two CR's in parallel to note the effect, but have not done so yet.
In his You Tube he says he has about 50% more frequency coverage that my radio has.

Has anyone else built one of these?

Thanks,

Fortney

26319. Re: [regenrx] Re: Faux Pas

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-02 17:15:51 UTC
From: Leonard Meek
Topic: 26259 Message: 26319

It seems to me that most of the discussion on "SL" vs "SN" involves simply swapping the tubes in a given circuit. But since the tube electrical characteristics are quite different, wouldn't some circuit components need to be changed to make a more realistic comparison?

Leonard

----- Original Message -----
From: dulmagedon@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Monday, May 02, 2016 1:41 AM
Subject: [regenrx] Re: Faux Pas

WEll, It was I. I have and use two dual triode regens (one upstairs and one down stairs) as a ham BTW , not a SWL. On one I now use a 12sl7 now simply because I can use a small solar panel and a 12 volt gel cell from a 2 M candlepower lantern to keep the heater power alive without thinking about it but essentially the characteristics are the same. If you are listening to broadcast stations or are a strongest station only Cw operator then the 6sn7 (or 12sn7) will be fine for you. I originally built mine for a 6sn7, truth be known, from the Linsday book. However if you are doing low power ops and like me , live not near any one else operating that mode then the 6sl7 or 12sl7 makes a noticeable difference in low level signal work. I used to think, like I am sure many of you do as well, the difference was neither here nor there but when push comes to shove I found myself reaching for the SL tube every time. I also built the regen from the 1943 ARRL handbook and use it with the matching breadboard transmitter from the same book on 80M. I didnt have the tube it called for so I subbed a 6sl7 and it also works well. Every once in awhile because I always double check myself I will pop in a 6sn7 or a 12sn7 just "to be sure" I wasn't lying to myself. I am as convinced as I can be that the difference s worth it and now can see no good reason not to use the SL from the git go. It is my understanding one was designed to amp voltage and one designed to amp power to put it crudely but in understandable terms. Probably if you could buy a tube which was one side 6sl7 for the regen detector and the other side 6sn7 for the audio amp you would have the best of both. If you aren't using it for low level ham QSOs it probably doesn't matter. You will never notice what you are missing.
BTW I also have a cathode modulator that uses a 6sl7 or 6sn7 in the speech amp. I use a dynamic mic in that circuit which is low output compared to a single button carbon mic with battery bias. I have poped a 6sl7 there as well. The difference is quite noticeable . So for me when dealing with low level inputs (weak signals or weak input) I now choose the 6sl7. If I have strong input and need power I use a 6sn7. That is my story and how I got there. Not a hill I want to die on but it has been my experience and no what I strongly beleive dirived from that. If you must use the 6sn7 because George Grammar or Sir Percy Maxim III said so go ahead. I am not built that way. Results trump every thng here.
donVe3LYX

26322. Re: Peter Parker's ceramic resonator radio, 40 Meters

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-02 23:53:31 UTC
From: b_weeber@...
Topic: 26316 Message: 26322

Hello Jerry

For me the circuit works well, one Resonator should be enough. My range reaches from 6960 ... 7130 kHz. What i need, is a band spread. What happens exactly with your circuit, does the oscillator stop? Please tell your tuning range.

Best regards,
Bernd

26323. Re: Peter Parker's ceramic resonator radio, 40 Meters

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-03 09:05:48 UTC
From: dawmast@...
Topic: 26316 Message: 26323

A regenerative receiver based upon a ceramic filter can be used as a regenerative IF stage in a superhet.

26324. Re: [regenrx] Re: Peter Parker's ceramic resonator radio, 40 Meters

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-03 09:37:16 UTC
From: Richard
Topic: 26316 Message: 26324

Nothing has been said about comparative performance. Do ceramic resonators perform better than a traditional regen? Inquiring minds want to know...

Richard, AA1P

26325. Re: Peter Parker's ceramic resonator radio, 40 Meters

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-03 09:41:36 UTC
From: b_weeber@...
Topic: 26316 Message: 26325
Attachments: 1 described; binary payloads are missing from this source WARC

> my tuner is 16-116pF

This is likely enough. You could increase C2, until the range gets down to 7.0 MHz.

26326. Re: Why 6AQ5s in the Novice Special receiver?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-03 21:52:56 UTC
From: les.au49@...
Topic: 26300 Message: 26326

KB8TAD published notes about a two tube regen. receiver using a 6SN7GT and 6V6GT. In this set the 6V6GT has the role of detector, and he drives a small speaker from the 6SN7GT. Thus he reverses the normal role of these two tubes.

Here is the link: http://www.ohio.edu/people/postr/bapix/Regen_HB.htm

Using this set for the first time he reported,

"I connected an output transformer and speaker to the phone jack and
proceeded to power it up with the little Heathkit power supply. The
set did not work well with the 6F6. The tube was extremely microphonic.
Finding nothing out of the ordinary in a very simple regen circuit, I plugged
in a 6V6 as originally intended. After [warming up] the set came to life.
Tweaking the 3 to 9 pF antenna trimmer (near yellow clip lead) brought
the noise level up a bit from my 80 meter antenna. I was surprised at
how well the little set worked. I listened to a number of SSB transmissions
and some CW."

and later

"With filaments starved a bit and feeding an output transformer
and speaker, the set performed well on 80 meters with about 60
to 90 volts of B+ at a current draw of about 4 to 5 milliamps."

He reported the remarkable observation that the set delivered "useable speaker volume" from a 12V supply. I guess this may be useful if the only source of power was a 12V battery, but one wonders about this crazy notion of running "tube radios" at such a low voltage, when 60 or 90 volts can be easily got, and offers much better performance.

But your topic was beam tetrodes in the role of detector. I return to that. We all have our innocent little fantasies. Since reading KB8TAD's article (and more recently your posting here, Dave) I've always wanted to build a set using a beam tetrode in the role of detector. Maybe your article will be the final push I need to get out the chassis punch!

Your point that you got greater stability using a 12A6 (with filament dissipation of 1.9W) in place of the 6V6 (filament dissipation of 2.83W) is interesting.

Did I remember correctly that you wrote the 12A6 was moderately microphonic?

Les

26327. Re: Why 6AQ5s in the Novice Special receiver?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-04 04:31:16 UTC
From: david.newkirk@...
Topic: 26300 Message: 26327

Les wrote:

> Did I remember correctly that you wrote the 12A6 was moderately microphonic?

Yes -- that in a 1700-kHz detector a few years back, when the 12A6s I had to choose from at the time were predominantly of RCA manufacture. Since then I've acquired a few handfuls of Ken-Rad 12A6s, and find them to be no more microphonic than any other tube. (Even the RCAs could be improved by doubling a thick rubber band around the middle of their envelope--but ultimately I think the superiority of the Ken-Rads is more an issue of better internal support. The RCAs seem to bong at a particular pitch in a way that the Ken-Rads don't.)

I'm glad to recommend the 12A6 as a detector. My BGCD Regenerodyne (http://dpnwritings.nfshost.com/ej/pictures/pictures1.htm http://dpnwritings.nfshost.com/ej/pictures/pictures1.htm) uses one in a Hartley detector at 3023 kHz (+/- 10 kHz, as its IF is modestly variable behind the set's crystal-controlled front end) and provides excellent results. (The BGCD also uses a 12A6, cathode-switched by a 2N7000 as described in http://dpnwritings.nfshost.com/ej/hybrid_mixer/ http://dpnwritings.nfshost.com/ej/hybrid_mixer/ , as its mixer.) Because the BGCD includes a 2N7000-as-variable-shunt-resistor-based RF gain control, I just plain don't have to adjust the BGCD's regeneration during operating periods. I just set it comfortably above critical regeneration and leave it, and adjust the RF input if signals become uncomfortably loud. My ears complain before pulling sets in!

And BTW considering that the BGCD also uses two 12J5s (metal, please, for better shielding), one for its grounded-grid IF buffer and the other for its AF output preamp, and that metal 12J5s aren't that common, I've just determined that a triode-connected 12SJ7, which tube is cheaper and more available than the metal 12J5, works just as well as the 12J5 in these two applications.

Best regards,

Dave

26328. Re: [regenrx] Re: Faux Pas

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-04 13:25:46 UTC
From: david.newkirk@...
Topic: 26259 Message: 26328

Leonard wrote:

> It seems to me that most of the discussion on "SL" vs "SN" involves simply swapping the tubes
> in a given circuit. But since the tube electrical characteristics are quite different, wouldn't some
> circuit components need to be changed to make a more realistic comparison?

For use as a detector, generally not. As AF amplifier, yes, as the xSN7 and xSL7 are covered in different tables in the Resistance Coupled Amplifiers section of the RCA receiving tube manuals, meaning that the two tubes should be biased differently (assuming cathode bias, requiring somewhat different values of cathode-bias resistor) for a given application.

That said, just swapping out tubes is a valid comparison for a given set of components. In such comparisons, one is not necessarily finding which tube is "better," but which of the two particular tubes tried is better _in that circuit, with that set of components_. The results _may_ be extendable to multiple individuals of the compared types.

Extra credit for characterizing exactly what's meant by "better" and "worse." For instance, I happen to not care in the slightest how my detectors work for broadcast reception--that is, in "AM" mode, when they're not oscillating. I use my regenerative receivers mainly for Morse code reception in two-way amateur-radio operations, and only very limitedly for SSB, and then only for listening to VOLMET weather broadcasts at 3485 and 6604 kHz. (Sure wish Gander would clean up that distortion...)

Best regards,

Dave
amateur radio W9BRD

26329. Re: [regenrx] Why 6AQ5s in the Novice Special receiver?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-04 14:41:07 UTC
From: J Ed
Topic: 26300 Message: 26329

I have played around with low voltage regenerative detectors and tried several tubes. Among the decent were 12V6, 12L6, 12DQ6, and 12CX6. The 12AW6s I tried didn't want to oscillate. One of the best tubes I tried was 12CN5, which was sensitive and liked to oscillate anywhere I needed. The problem is that it uses 450ma at 12v for its enormous cathode.

My best Regen ran at 24v and used a 12AT7 and 12AU7 in a 1v2 configuration. I could use it up to 7 or 8 MHz although the coils I wound for it made oscillation tough on the higher frequencies.

I may try again with the 12CN5. I have almost a dozen of them. It is a tube no one seemed to ever want.

Ed AE7TE

On Tuesday, May 3, 2016, david.newkirk@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
>
> Les wrote:
>
>> Did I remember correctly that you wrote the 12A6 was moderately microphonic?
> Yes -- that in a 1700-kHz detector a few years back, when the 12A6s I had to choose from at the time were predominantly of RCA manufacture. Since then I've acquired a few handfuls of Ken-Rad 12A6s, and find them to be no more microphonic than any other tube. (Even the RCAs could be improved by doubling a thick rubber band around the middle of their envelope--but ultimately I think the superiority of the Ken-Rads is more an issue of better internal support. The RCAs seem to bong at a particular pitch in a way that the Ken-Rads don't.)
> I'm glad to recommend the 12A6 as a detector. My BGCD Regenerodyne (http://dpnwritings.nfshost.com/ej/pictures/pictures1.htm) uses one in a Hartley detector at 3023 kHz (+/- 10 kHz, as its IF is modestly variable behind the set's crystal-controlled front end) and provides excellent results. (The BGCD also uses a 12A6, cathode-switched by a 2N7000 as described in http://dpnwritings.nfshost.com/ej/hybrid_mixer/ , as its mixer.) Because the BGCD includes a 2N7000-as-variable-shunt-resistor-based RF gain control, I just plain don't have to adjust the BGCD's regeneration during operating periods. I just set it comfortably above critical regeneration and leave it, and adjust the RF input if signals become uncomfortably loud. My ears complain before pulling sets in!
> And BTW considering that the BGCD also uses two 12J5s (metal, please, for better shielding), one for its grounded-grid IF buffer and the other for its AF output preamp, and that metal 12J5s aren't that common, I've just determined that a triode-connected 12SJ7, which tube is cheaper and more

available than the metal 12J5, works just as well as the 12J5 in these two applications.
> Best regards,
> Dave
>
>
>
>
>
>

26330. Re: [regenrx] Re: Faux Pas

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-04 17:25:39 UTC
From: Leonard Meek
Topic: 26259 Message: 26330

I suspected as much, Dave, but I wanted to hear it from you. I'm not a ham so I don't listen to much CW. I do like to be able to get SSB occassionally, and even CB sometimes. I always start with local AM atations and try to get some of the outside islands, or even Samoa (at 540KHz). It's surprising how some tubes will work well in one band and not so much in others. I assume that to be a function at least in part because of the interelectrode capacitances.

Leonard

----- Original Message -----
From: david.newkirk@gmail.com [regenrx]
To: regenrx@yahoogroups.com
Sent: Wednesday, May 04, 2016 3:25 AM
Subject: Re: [regenrx] Re: Faux Pas

Leonard wrote:

> It seems to me that most of the discussion on "SL" vs "SN" involves simply swapping the tubes
> in a given circuit. But since the tube electrical characteristics are quite different, wouldn't some
> circuit components need to be changed to make a more realistic comparison?

For use as a detector, generally not. As AF amplifier, yes, as the xSN7 and xSL7 are covered in different tables in the Resistance Coupled Amplifiers section of the RCA receiving tube manuals, meaning that the two tubes should be biased differently (assuming cathode bias, requiring somewhat different values of cathode-bias resistor) for a given application.

That said, just swapping out tubes is a valid comparison for a given set of components. In such comparisons, one is not necessarily finding which tube is "better," but which of the two particular tubes tried is better _in that circuit, with that set of components_. The results _may_ be extendable to multiple individuals of the compared types.

Extra credit for characterizing exactly what's meant by "better" and "worse." For instance, I happen to not care in the slightest how my detectors work for broadcast reception--that is, in "AM" mode, when they're not oscillating. I use my regenerative receivers mainly for Morse code reception in two-way amateur-radio operations, and only very limitedly for SSB, and then only for listening to VOLMET weather broadcasts at 3485 and 6604 kHz. (Sure wish Gander would clean up that distortion...)

Best regards,

Dave
amateur radio W9BRD

26331. Re: Peter Parker's ceramic resonator radio, 40 Meters

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-04 11:31:13 UTC
From: Robert L. Pendergast
Topic: 26316 Message: 26331

In my case limited frequency range provided great bandspread.
The radio has good selectivity.
I don't find winding coils to be a problem.

fortney

26332. Re: [regenrx] Why 6AQ5s in the Novice Special receiver?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-05 12:10:40 UTC
From: david.newkirk@...
Topic: 26300 Message: 26332

Ed wrote:

> One of the best tubes I tried was 12CN5, which was sensitive and liked to oscillate anywhere
> I needed. The problem is that it uses 450ma at 12v for its enormous cathode.

and

> I may try again with the 12CN5. I have almost a dozen of them. It is a tube no one seemed
> to ever want.

Very interesting! The 12CN5 is one of that short-lived class of tubes designed to be sufficiently transistorish (12.6 V heater, 12 [16] or 30 V plate/screen max, depending on the type) to be used as part of hybrid (tube/transistor) designs, when acceptably good/robust transistors were available to make AF power, but transistor RF performance was meh. So in that range we have RF/IF amps, a converter tube or two, triode-diode(s), and a dual triode (12U7) or two--and we have the 12K5, a "space charge" power tetrode (actually works like a triode, because its Grid 1 is not for control but as a high-current accelerator to make the thing draw more plate current) designed to drive AF power transistors for automotive radios).

Yes, that's quite a heater drain--the same power drawn by the heater of a 6L6, only at 12.6 V, I guess for the purpose of achieving relatively high transconductance with only 12.6 V on its plate. So if you're using the tube for a CW/SSB regen, you'll want to locate the tube a hair farther than you might away from the tuned circuit so less that 5.7 W worth of heat gets to your frequency-determining components, even adding suitable ventilation (if the receiver is in a box) so the heat builds up less (and takes longer to build up). (In experimental receivers here I've found even the less-drastic heater-power difference between, say, a 6SN7 (0.6 A at 6.3 V) and wired-for-6.3-V 12AU7 (0.3 A at 6.3 V) to make a noticeable difference in warmup drift in a given radio.

And 12CN5s only a buck or two on Ebay. As you've guessed, that revolving-blue-light-special price comes from their relatively fleeting, limited application. More goodies for us, cheaper!

More "12 V on the plate" experimental candidates are listed in Jeff Duntemann's writeup at http://www.junkbox.com/electronics/lowvoltagetubes.shtml
http://www.junkbox.com/electronics/lowvoltagetubes.shtml .

Best regards,

Dave
amateur radio W9BRD
radio pages: http://dpnwritings.nfshost.com/ej/ http://dpnwritings.nfshost.com/ej/

26333. Re: [regenrx] Why 6AQ5s in the Novice Special receiver?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-05 20:30:00 UTC
From: J Ed
Topic: 26300 Message: 26333

A plate detector would make a decent mixer, with both frequencies fed into the grid through an appropriate resistor network. So, if one were trying to make a superheterodyne or direct conversion receiver, this type of receiver would work well.

My experience with using such low-voltage tubes as regenerative detectors is that you'd do well to follow them up with a tube audio amplifier. The high impedance of the grid circuit will ensure the detector tube goes into oscillation when it needs to. An LM386 amplifier, having an input impedance of ~25-50K, could prevent oscillation when called upon.

High perveance tubes, such as the old television sweep tubes, work well at low voltages because they are designed to conduct much current at lower voltages. One of the first tube receivers I built used a 12DQ6 detector and a 12DK7 audio power amplifier. A 120-12v transformer served as a plate load and worked well enough.

Ed AE7TE

On Thu, May 5, 2016 at 7:10 AM, david.newkirk@... [regenrx] <
regenrx@yahoogroups.com> wrote:

>
>
> Ed wrote:
>
> > One of the best tubes I tried was 12CN5, which was sensitive and liked
> to oscillate anywhere
> > I needed. The problem is that it uses 450ma at 12v for its enormous
> cathode.
>
> and
>
> > I may try again with the 12CN5. I have almost a dozen of them. It is a
> tube no one seemed
> > to ever want.
>
> Very interesting! The 12CN5 is one of that short-lived class of tubes
> designed to be sufficiently transistorish (12.6 V heater, 12 [16] or 30 V
> plate/screen max, depending on the type) to be used as part of hybrid
> (tube/transistor) designs, when acceptably good/robust transistors were
> available to make AF power, but transistor RF performance was meh. So in
> that range we have RF/IF amps, a converter tube or two, triode-diode(s),
> and a dual triode (12U7) or two--and we have the 12K5, a "space charge"
> power tetrode (actually works like a triode, because its Grid 1 is not for
> control but as a high-current accelerator to make the thing draw more plate

> current) designed to drive AF power transistors for automotive radios).
>
> Yes, that's quite a heater drain--the same power drawn by the heater of a
> 6L6, only at 12.6 V, I guess for the purpose of achieving relatively high
> transconductance with only 12.6 V on its plate. So if you're using the tube
> for a CW/SSB regen, you'll want to locate the tube a hair farther than you
> might away from the tuned circuit so less that 5.7 W worth of heat gets to
> your frequency-determining components, even adding suitable ventilation (if
> the receiver is in a box) so the heat builds up less (and takes longer to
> build up). (In experimental receivers here I've found even the less-drastic
> heater-power difference between, say, a 6SN7 (0.6 A at 6.3 V) and
> wired-for-6.3-V 12AU7 (0.3 A at 6.3 V) to make a noticeable difference in
> warmup drift in a given radio.
>
> _And_ 12CN5s only a buck or two on Ebay. As you've guessed, that
> revolving-blue-light-special price comes from their relatively fleeting,
> limited application. More goodies for us, cheaper!
>
> More "12 V on the plate" experimental candidates are listed in Jeff
> Duntemann's writeup at
> http://www.junkbox.com/electronics/lowvoltagetubes.shtml .
>
> Best regards,
>
> Dave
> amateur radio W9BRD
> radio pages: http://dpnwritings.nfshost.com/ej/
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26334. Re: Why 6AQ5s in the Novice Special receiver?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-07 02:24:38 UTC
From: les.au49@...
Topic: 26300 Message: 26334

"I'm glad to recommend the 12A6 as a detector." - Dave Newkirk, W9BRD

I'm changing the topic slightly from 6AQ5 to "beam power tubes as detector". While I'm fascinated with the idea of using beam tetrodes as a detector in a Jones Superhet, I'll resist the temptation to try a new idea before I finish the set I'm presently working on here (in Aus). I began building this set because Prof. Coro wrote favourably about it here. But he described a 'straight' regen set, whereas I prefer a Jones superhet. I use a pentode mixer (6AK5) followed by a 6AK5 detector. After this I have emitter follower to provide a high-Z buffer to the detector. In your "writings" (Dave) I seem to recall you recommend a "tube" to buffer the high-Z output from the detector. (I looked, but couldn't find this point.) I chose to use an emitter follower circuit - mainly because it's easy to build, and MUST work.

This emitter follower provides a conveniently low-Z signal to drive an audio amplifier - and bipolar transistors are well suited to this task. (As an aside - someone here asked me about using this circuit to drive 32ohm earbuds. I'll provide that after I make some measurements to show my circuit is well designed, and not simply parts thrown together in a hurry.)

I can't provide any comparison between the "standard" Hartley detector and the "beam tetrode" detector. I haven't built the latter. Prof Coro's notes led me to the Hartley-6Ak5-pentode detector. He recommended using 36 Volts for the B+ supply; reading his more recent comments I'm not sure he holds that view about a 36V B+ any longer. I CAN say his observation that the Hartley-pentode circuit combined with screen grid regeneration control (as distinct from "tickler") gives silky smooth regeneration. I don't need a "fine" and "coase" regen control - or an expensive variable capacitor. Just a garden variety 20k carbon pot. (If you read this, Prof Coro, I'd like to send you the circuit I drew. If you see any deviation from your design I'll be pleased to re-draw my circuit to meet your spec. I'd like to publish it here - under your name, of course. It is, after all, your "baby". I'm sure many others will be interested to duplicate your success.)

Returning to your Goodman-BI superhets (Dave) - where the 2N7000 modulates the mixer - I looked at your notes (and newer circuit) and conclude that this is a more efficient way to inject the L.O. signal into the mixer than the the setup you show in Fig 7 on this - http://dpnwritings.nfshost.com/ej/goodman_receiver/ - page.

This (Fig 7) is more or less the circuit I use in my receiver, but I plan to use the 2N7000, as I wrote a moment ago.

The other circuit I find interesting is the Polish "spy" radio, the Pipsztok. This is a Jones superhet, using a 6K8 freq. converter and then a 6SJ7 as detector in a very conventional Hartley circuit - rather like the circuit Don Mix published in QST 1956. (I compare only the detector - not the design of the two receivers). This (the Mix design) is the common 0-V-1 regen receiver, but completely unconventional in the use of a 6AQ5 in both stages. Don Mix controls regeneration using a 50k pot in the screen grid circuit. Completely conventional.

The AF stage is the interesting point of difference. Mix used a second 6AQ5 as the AF amplifier; this drives either a speaker or phones. The pipsztok has NO AF amplifier - the detector drives hi-Z phones directly! Both circuits are, according to my view, amazing! How can Don Mix get enough gain to drive a speaker? How can the Poles match the output "Z" for a pentode detector to 4k headphones? Sure, the 6K8 may give a gain of 4 or 5, but this can't match the gain of x15 or x20 from an AF amplifier, and in these minimalist sets, the microvolt signal levels need all the gain they can get. It's 1450 km (or for those who prefer - 900 miles) between London & Warsaw. Even on 40m that's good going for a two tube receiver, and for these fellows, their life hung on a thread! 25% of all underground radio operators in Poland "got a bullet" - one way or another. So - performance mattered. They didn't want to spend more time than necessary 'on air'.

So I don't understand either Mix or the Pipsztok approach. How did Mix get enough gain to drive a speaker? How did the Poles get sound from phones that were mismatched by a factor of (I guess) 10 or 20?

I DO understand that the underground would seek to minimize battery drain. I DO understand that a third tube would increase the load on the battery by 50%. I DO understand that these fellows were unimaginably clever (they broke the enigma code, after all!) and I'm confident (without proof) that they tested the benefit of a third tube (as AF amplifier) and discarded the idea. I just don't understand the physics behind their final circuit design. Maybe some-one here can explain how a detector running (probably) less than a mA plate current from a good B+ supply can properly match the impedance of head-phones.

So - the 6AQ5 makes an interesting detector - comparable to the 12A6. It's just that there are quite a few unsolved mysteries in how people extracted the performance we know they got from these circuits and components.

Les

26335. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-07 03:56:59 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 26335

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Leonard's Stuff/Mk. 21 Mod 3c.bmp
Uploaded by : leonardmeek <lemeek@...>
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https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

leonardmeek <lemeek@...>

26336. Mk.21 Mod 3c

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-07 04:20:43 UTC
From: Leonard Meek
Topic: 26336 Message: 26336

I just posted the Mod 3c version of my one tube Mk.21. I tried an A53 audio coupling xfmr in the mod 3b but the increased gain seems to have picked up a bad hum, so I went back to RC coupling in the Mod 3c. The 7809 VR is now a 7812, which gives a little more drive to the 2 inch speaker. The detector plate load resistor is increased to 200K, and the LM386 input is zenered as Dave Newkirk recommended. I found that running the LM386 off raw DC befor the VR wasn't the cleverest thing to do. The chips I was using were N-1's, the 12V version, and the raw DC was 14.5V. I may have smoked a couple of them running them that way. Another thing I found with the 9001 is it's very microphonic. Maybe that's just the one I was using. I was too lazy to dig out my 9001 stash to find out. Anyhow, the 6AK5 works just fine. The set is better suited to use headphones, but I like speakers.

26337. Re: Mk.21 Mod 3c

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-07 05:48:40 UTC
From: les.au49@...
Topic: 26336 Message: 26337

Hello Leonard: Looking at the zeners across the input to the LM386 - what do they do? Clip spikes that might kill the chip? That's Q1.

Q2. You're using a tickler (Armstrong) coil and screen grid voltage to control regeneration. How smooth? Silky smooth?

What can you hear on this?

Les

26338. Re: [regenrx] From Arnie Coro more about 6AQ5s , 6AK5's etc

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-07 12:06:36 UTC
From: Prof. Arnaldo Coro Antich
Topic: 26300 Message: 26338

About amigo Les's REGENERODYNE

Dear amigos; Les use of a mixer ahead of a regenerative detector is what Gary Johanson and yours truly claim to be a REGENERODYNE RECEIVER, i.e. a superheterodyne receiver that instead of using a straight diode detector or a product detector, uses a fully adjustable regenerative detector.
When carefully and properly done coupling between the mixer stage and the regenerative detector is achieved... the sensitivity and selectivity that can be achieved with the detector tuning around 2 to 3 megaHertz is remarkable.
Collins Radio designs using variable IF after a crystal controlled converter at the input is second to none as regards to performance....
The abundance and low cost (no use for the audio fools fanatics) 6AK5, 5654 , 6ZHE1P tubes and their transfer function as the screen grid voltage is moved around makes them ideal for a 2 to 3 megaHertz regenerative detector. Recently a friend found at an old radio repair shop a box full of 6BZ6's by Toshiba of Japan, and they do have more gain than the 6AK5, but the regeneration control performance is not as sweet and nice as with the 6AK5...
Nevertheless they can be used on a straight regenerative as more gain is available at higher frequencies like the 28 mHz amateur band and the horrible 27 mHz ¨ Citizens ??? ¨ band that by the way makes an excellent DX propagation indicator for band openings as there is a lot more activity between 26 and 28 megaHertz than what can be presently heard on the 10 meters band most populated segment 28.0 to 29.0 megaHertz.
Please amigo Les, send your circuit diagram and it is going to be my pleasure to take a nice look at it...
Never forget that the use of regulated DC applied to the filaments of the regenerative detector tube and if possible the first AF amplifier stage is a very good idea !!! I also found out that running the 6AK5's filaments at 5.7 volts makes them work very well...
Just add a 1N4007 diode to the earth leg of a 7805 and you have 5.7 volts... but it you add two 1N4007's the filament voltage will increase to 6.4 volts... still within perfect operational values....and possible of use with slightly worn out tubes !!! No need to go to 6.4 volts with my 6ZHE1P's that are of an extremely high quality ....
About the plate voltage for the regenerative detector, you certainly

will get more gain
while running 50 and more volts ...but as aircraft flight manuals say ¨
never to exceed¨ 140/150 volts... and better yet keep the plate voltage
around 100/110 volts (VR105's still found ??)

73 and DX
Arnie Coro
CO2KK
Listen to my Dxers Unlimited radio hobby
program , with an emphasis of the technical
side of the hobby... over Radio Havana Cuba
Tuesday and Wednesday UTC days and
Sunday and Monday UTC day ... for the full
schedule just drop me a note to
arnaldo dot coro at gmail dot com

On 06/05/16 22:24, les.au49@... [regenrx] wrote:
>
>
>
> "I'm glad to recommend the 12A6 as a detector." - Dave Newkirk, W9BRD
>
> I'm changing the topic slightly from 6AQ5 to "beam power tubes as
> detector". While I'm fascinated with the idea of using beam tetrodes
> as a detector in a Jones Superhet, I'll resist the temptation to try a
> new idea before I finish the set I'm presently working on here (in
> Aus). I began building this set because Prof. Coro wrote favourably
> about it here. But he described a 'straight' regen set, whereas I
> prefer a Jones superhet. I use a pentode mixer (6AK5) followed by a
> 6AK5 detector. After this I have emitter follower to provide a high-Z
> buffer to the detector. In your "writings" (Dave) I seem to recall you
> recommend a "tube" to buffer the high-Z output from the detector. (I
> looked, but couldn't find this point.) I chose to use an emitter
> follower circuit - mainly because it's easy to build, and MUST work.
>
> This emitter follower provides a conveniently low-Z signal to drive an
> audio amplifier - and bipolar transistors are well suited to this
> task. (As an aside - someone here asked me about using this circuit
> to drive 32ohm earbuds. I'll provide that after I make some
> measurements to show my circuit is well designed, and not simply parts
> thrown together in a hurry.)
>
> I can't provide any comparison between the "standard" Hartley detector
> and the "beam tetrode" detector. I haven't built the latter. Prof
> Coro's notes led me to the Hartley-6Ak5-pentode detector. He
> recommended using 36 Volts for the B+ supply; reading his more recent
> comments I'm not sure he holds that view about a 36V B+ any longer. I
> CAN say his observation that the Hartley-pentode circuit combined with
> screen grid regeneration control (as distinct from "tickler") gives
> silky smooth regenerati on. I don't need a "fine" and "coase" regen
> control - or an expensive variable capacitor. Just a garden variety

> 20k carbon pot. (If you read this, Prof Coro, I'd like to send you
> the circuit I drew. If you see any deviation from your design I'll be
> pleased to re-draw my circuit to meet your spec. I'd like to publish
> it here - under your name, of course. It is, after all, your "baby".
> I'm sure many others will be interested to duplicate your success.)
>
> Returning to your Goodman-BI superhets (Dave) - where the 2N7000
> modulates the mixer - I looked at your notes (and newer circuit) and
> conclude that this is a more efficient way to inject the L.O. signal
> into the mixer than the the setup you show in Fig 7 on this -
> http://dpnwritings.nfshost.com/ej/goodman_receiver/ - page.
>
> This (Fig 7) is more or less the circuit I use in my receiver, but I
> plan to use the 2N7000, as I wrote a moment ago.
>
> The other circuit I find interesting is the Polish "spy" radio, the
> Pipsztok. This is a Jones superhet, using a 6K8 freq. converter and
> then a 6SJ7 as detector in a very conventional Hartley circuit -
> rather like the circuit Don Mix published in QST 1956. (I compare
> only the detector - not the design of the two receivers). This (the
> Mix design) is the common 0-V-1 regen receiver, but completely
> unconventional in the use of a 6AQ5 in both stages. Don Mix controls
> regeneration using a 50k pot in the screen grid circuit. Completely
> conventional.
>
> The AF stage is the interesting point of difference. Mix used a
> second 6AQ5 as the AF amplifier; this drives either a speaker or
> phones. The pipsztok has NO AF amplifier - the detector drives hi-Z
> phones directly! Both circuits are, according to my view, amazing!
> How can Don Mix get enough gain to drive a speaker? How can the Po
> les match the output "Z" for a pentode detector to 4k headphones?
> Sure, the 6K8 may give a gain of 4 or 5, but this can't match the gain
> of x15 or x20 from an AF amplifier, and in these minimalist sets, the
> microvolt signal levels need all the gain they can get. It's 1450 km
> (or for those who prefer - 900 miles) between London & Warsaw. Even
> on 40m that's good going for a two tube receiver, and for these
> fellows, their life hung on a thread! 25% of all underground radio
> operators in Poland "got a bullet" - one way or another. So -
> performance mattered. They didn't want to spend more time than
> necessary 'on air'.
>
> So I don't understand either Mix or the Pipsztok approach. How did
> Mix get enough gain to drive a speaker? How did the Poles get sound
> from phones that were mismatched by a factor of (I guess) 10 or 20?
>
> I DO understand that the underground would seek to min imize battery
> drain. I DO understand that a third tube would increase the load on
> the battery by 50%. I DO understand that these fellows were
> unimaginably clever (they broke the enigma code, after all!) and I'm
> confident (without proof) that they tested the benefit of a third tube

> (as AF amplifier) and discarded the idea. I just don't understand the
> physics behind their final circuit design. Maybe some-one here can
> explain how a detector running (probably) less than a mA plate current
> from a good B+ supply can properly match the impedance of head-phones.
>
> So - the 6AQ5 makes an interesting detector - comparable to the 12A6.
> It's just that there are quite a few unsolved mysteries in how people
> extracted the performance we know they got from these circuits and
> components.
>
> Les
>
>

26339. Re: [regenrx] Re: Mk.21 Mod 3c

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-07 17:31:30 UTC
From: Leonard Meek
Topic: 26336 Message: 26339

Les, there's a voltage spike from the detector at turn on from the solid state rectifier. Dave Newkirk recommended putting zeners acros the LM386 input to protect it. I also found that there are more than one version of the '386: The LM386 N-1 is a 12V max version. The LM386 N-4 can take 18V max. Another thing I discovered was the coils I was using were the ones I originally wound on 4 pin tube bases for the regen I built back in the early '50's. I followed the instructions religeously in the magazine article, which put the tickler winding next to the grid end of the tank coil. Regen control was nervous at best. I tried my newer coils wound on standard coil forms with the tickler coil on the ground side of the tank coil, and the sensitivity is better and regen control is smoother. I think now that I've squeezed as much out of this circuit as I can, and it's time to move on.

Leonard

----- Original Message -----
From: les.au49@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Friday, May 06, 2016 7:48 PM
Subject: [regenrx] Re: Mk.21 Mod 3c

Hello Leonard: Looking at the zeners across the input to the LM386 - what do they do? Clip spikes that might kill the chip? That's Q1.

Q2. You're using a tickler (Armstrong) coil and screen grid voltage to control regeneration. How smooth? Silky smooth?

What can you hear on this?

Les

26340. Re: [regenrx] Re: Mk.21 Mod 3c 10v zeners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-08 02:34:09 UTC
From: Rob
Topic: 26336 Message: 26340

This MK21... is this based on a radio article that explains a complete build?

I've found circuits using 5 VOLT 1N751A zeners in front of MPF102 Jfets to protect from spikes
when plugging a guitar into a pre-amp.
This MK21 Mod 3C circuit shows 10V 1N758A.
Can I substitute those 1N758A diodes with my 5 volt 1N7541A diodes or would that let the magic smoke out of the LM386 ?
Would I hear anything different in this circuit if I used 1N7541A diodes?

On 05/07/2016 01:31 PM, 'Leonard Meek' lemeek@... [regenrx] wrote:
>
> □
>
> Les, there's a voltage spike from the detector at turn on from the
> solid state rectifier. Dave Newkirk recommended putting zeners acros
> the LM386 input to protect it. I also found that there are more than
> one version of the '386: The LM386 N-1 is a 12V max version. The LM386
> N-4 can take 18V max. Another thing I discovered was the coils I was
> using were the ones I originally wound on 4 pin tube bases for the
> regen I built back in the early '50's. I followed the instructions
> religeously in the magazine article, which put the tickler winding
> next to the grid end of the tank coil. Regen control was nervous at
> best. I tried my newer coils wound on standard coil forms with the
> tickler coil on the ground side of the tank coil, and the sensitivity
> is better and regen control is smoother. I think now that I've
> squeezed as much out of this circuit as I can, and it's time to move on.
> Leonard
>
> ----- Original Message -----
> *From:* les.au49@... [regenrx]
> <mailto:les.au49@...%20[regenrx]>
> *To:* regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>
> *Sent:* Friday, May 06, 2016 7:48 PM
> *Subject:* [regenrx] Re: Mk.21 Mod 3c
>
> Hello Leonard: Looking at the zeners across the input to the
> LM386 - what do they do? Clip spikes that might kill the chip?
> That's Q1.
>
> Q2. You're using a tickler (Armstrong) coil and screen grid
> voltage to control regeneration. How smooth? Silky smooth?
>

> What can you hear on this?
>
> Les
>
>

26341. RE: [regenrx] Re: Mk.21 Mod 3c

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-08 12:25:57 UTC
From: Larry
Topic: 26336 Message: 26341

Awesome, Leonard, just awesome!

Larry

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Saturday, May 07, 2016 1:32 PM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Re: Mk.21 Mod 3c

☐

Les, there's a voltage spike from the detector at turn on from the solid state rectifier. Dave Newkirk recommended putting zeners acros the LM386 input to protect it. I also found that there are more than one version of the '386: The LM386 N-1 is a 12V max version. The LM386 N-4 can take 18V max. Another thing I discovered was the coils I was using were the ones I originally wound on 4 pin tube bases for the regen I built back in the early '50's. I followed the instructions religeously in the magazine article, which put the tickler winding next to the grid end of the tank coil. Regen control was nervous at best. I tried my newer coils wound on standard coil forms with the tickler coil on the ground side of the tank coil, and the sensitivity is better and regen control is smoother. I think now that I've squeezed as much out of this circuit as I can, and it's time to move on.

Leonard

26342. Re: [regenrx] Re: Mk.21 Mod 3c

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-08 14:09:41 UTC
From: david.newkirk@...
Topic: 26336 Message: 26342

Leonard wrote:

> Les, there's a voltage spike from the detector at turn on from the solid state rectifier.
> Dave Newkirk recommended putting zeners acros the LM386 input to protect it.
> I also found that there are more than one version of the '386: The LM386 N-1 is a 12V max version.
> The LM386 N-4 can take 18V max.

What I was talking about was that using transistors or similarly low-voltage devices downstream of tubes, with coupling/blocking capacitors keeping the relatively high dc from the plate of the last tube stage from getting to the input of the first solid-state/low-voltage device, endangers the low-voltage devices because the coupling capacitor must charge on power-up.

Yes, this tend to be worse with power supplies using solid-state rectifiers because their output voltage comes up rapidly, as there's no rectifier filament/heater to heat. The magnitude of the surge is also the greater for the fact that the tubes that will draw current from the supply take the greater part of a minute to heat and come up to full current usages--a problem that designers of power supplies even for tube gear must face, as the (usually) directly heated tube rectifiers come up to heat much more rapidly that the (usually) indirectly heated tubes they power.

And so that's why I suggested putting Zeners across the _input_ of the first solid-state device that's downstream of the coupling capacitor. (I assume that the input circuitry of that device includes resistance to ground capable of serving as the charging path for the current through the blocking/coupling C.)

That said, however, I would not assume that the "voltageness" of, in this case, the LM386N (-1 v -3 v -4 variants) has anything to do with the device's ability to tolerate voltage surges at its _input_. Those ratings are about _supply_ voltage. More to this point, I see that the Texas Instruments spec sheet for the 386 lists in its "Absolute Maximum" section "Input voltage: +/- 0.4 V." 0.4 V!

Hmm, a SPICE analysis of how much voltage temporarily appears at the junction of, say, a 0.01-uF capacitor in series through a 10-kilohm resistor to common (10-k AF GAIN control set to max at the input of an LM386) that's suddenly connected to, say, 250 V, would be instructional.

Also very useful would be for someone with a scope or suitable high-Z audio voltmeter to give us an idea of how much max AF voltage appears at the grid of the first audio stage downstream of a vacuum-tube detector. (I have neither.)

And BTW, we should consider that the above scenario actually overloads (in the "optimum load value for maximum voltage gain" sense) a vacuum-tube voltage amplifier that drives an AF GAIN control of 10 kilohms or less. Vacuum-tube voltage amplifiers provide the most gain when driving loads (in the form of the grid resistor of the next stage) many times higher in resistance than the plate resistor of the driving stage. What we should really be doing

to better interface a high-plate-voltage vacuum-tube detector or AF stage to a lower-impedance load is use a cathode, emitter or source follower to drive that 5-k or 10-k AF GAIN control---preferably a cathode or source follower, as these especially can be designed to exhibit the high input impedance appropriate as the load for a vacuum-tube detector or amplifier. When this is done, voltage-surge protection will still be necessary at the interface between the last vacuum tube and the first low-voltage device downstream. The level at which to clamp would best be set after investigation of the AF and surge voltages to be expected at the interface point.

Best regards,

Dave
amateur radio W9BRD
radio pages: http://dpnwritings.nfshost.com/ej/ http://dpnwritings.nfshost.com/ej/

26343. Re: [regenrx] Re: Mk.21 Mod 3c

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-08 16:55:28 UTC
From: david.newkirk@...
Topic: 26336 Message: 26343

I wrote:

> Hmm, a SPICE analysis of how much voltage temporarily appears at the junction of,
> say, a 0.01-uF capacitor in series through a 10-kilohm resistor to common (10-k
> AF GAIN control set to max at the input of an LM386) that's suddenly connected to,
> say, 250 V, would be instructional.

Well, duh. We don't need a circuit simulator to analyze the worst case, as the worst case is the voltage that appears across the AF GAIN control when the supply voltage hits with the coupling capacitor discharged. A discharged capacitor initially acts like a short circuit for dc, so we can analyze the peak dc voltage across the AF GAIN control merely be calculating the dc voltage drop across the control.

So, for instance, assume a detector plate load resistor of 150 kilohms and an AF GAIN control of 10 kilohms. Seriesed--as they are for dc applied to the power-supply end of the 150-k detector plate load resistor---they add up to 160 kilohms.

Also for instance, assume a detector plate supply level of 250 V. So when that voltage suddenly appears at the supply end of our detector's 150-k plate load resistor, it appears across the 160-kilohm series combination of that resistor and our 10-kilohm AF GAIN control, with the interposed coupling C temporarily acting like a short circuit.

Only 10-kilohms' worth of that drop--10/160--appears across the AF GAIN control. That equates to 0.0625 times 250, or 15.625 V. That's much higher than the 0.4 V absolute maximum the LM386 can tolerate, so we need to keep it from getting to the input of the LM386. If our AF GAIN control happens to be set to zero or an intermediate value that allows no more than 0.4 V or to to be applied to the LM386, we luck out for this power-up event. If not, the LM386 input is likely damaged such that the device can't work.

Shooting from the hip, I suggested Zener diodes, at the time knowing neither the LM386's input limitations nor the magnitude of the voltage surge to expect. Considering the low (0.4 V) absolute max of the LM386 input, I think that a forward-conducting silicon diode (cathode to ground) between the AF GAIN wiper and ground is a better idea.

A 1N4148 or 1N4152 silicon switching diode (voltage drop, 0.6 to 0.7 V) should suffice. 250 V across 150 k results in only 1.7 mA of current flow, so even in the worst case the current through the protective diode would be much lower than the part's average forward current max of 150 mA. 0.6 to 0.7 V is more than the LM386's absolute max, but it would likely provide useful protection. A germanium diode (voltage drop, 0.3 to 0.4 V) would get us closer.

In installing these diodes causes noticable audio distortion, however, it's back to the drawing board. I'm glad that tubes are more forgiving!

All of this said, BTW, we are actually overloading (in the sense of "too low a load resistance for maximum gain") the vacuum-tube stage that drives the LM386, if that stage is acting like an AF voltage amplifier with its output taken from the plate via a blocking C.

For max gain, a tube so configured (as a resistance-coupled amplifier) needs to "see" a next-stage input resistance that's considerably higher than the value of its plate dropping resistor. Yet we commonly see 5 k or 10 k suggested as the AF GAIN control max resistance to use with LM38x-series AF amplifier ICs. So to best interface a tube detector or amplifier with such a lower-impedance low-voltage stage, we should interpose a cathode, source or emitter follower for impedance conversion. A cathode or source follower would be better than an emitter follower, as these can be configured to exhibit the high input resistance that the preceding vacuum-tube stage requires for maximum voltage gain.

Best regards,

Dave
amateur radio W9BRD

26344. Re: [regenrx] Re: Mk.21 Mod 3c

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-08 17:40:21 UTC
From: Leonard Meek
Topic: 26336 Message: 26344

Thanks, Dave. Most instructional, especially the last paragraph. I wondered about the values of the plate losd resistor and the input resistance of the following stage. I'll had to see if I can include an emmitter follower. The 12 and 18 volts I was refering to were supply voltages. It was important in this because the DC voltage I first connected the 386 to was 14.5 volts, and I may have damaged a couple of the chips.

Leonard

----- Original Message -----
From: david.newkirk@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Sunday, May 08, 2016 4:09 AM
Subject: Re: [regenrx] Re: Mk.21 Mod 3c

Leonard wrote:

> Les, there's a voltage spike from the detector at turn on from the solid state rectifier.
> Dave Newkirk recommended putting zeners acros the LM386 input to protect it.
> I also found that there are more than one version of the '386: The LM386 N-1 is a 12V max version.
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Yes, this tend to be worse with power supplies using solid-state rectifiers because their output voltage comes up rapidly, as there's no rectifier filament/heater to heat. The magnitude of the surge is also the greater for the fact that the tubes that will draw current from the supply take the greater part of a minute to heat and come up to full current usages--a problem that designers of power supplies even for tube gear must face, as the (usually) directly heated tube rectifiers come up to heat much more rapidly that the (usually) indirectly heated tubes they power.

And so that's why I suggested putting Zeners across the _input_ of the first solid-state device that's downstream of the coupling capacitor. (I assume that the input circuitry of that device includes resistance to ground capable of serving as the charging path for the current through the blocking/coupling C.)

That said, however, I would not assume that the "voltageness" of, in this case, the LM386N (-1 v -3 v -4 variants) has anything to do with the device's ability to tolerate voltage surges at its _input_. Those ratings are about _supply_ voltage. More to this point, I see that the Texas Instruments spec sheet for the 386 lists in its "Absolute Maximum" section "Input voltage: +/- 0.4 V." 0.4 V!

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Best regards,

Dave
amateur radio W9BRD
radio pages: http://dpnwritings.nfshost.com/ej/

26345. Re: [regenrx] Re: Mk.21 Mod 3c

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-08 17:46:19 UTC
From: Leonard Meek
Topic: 26336 Message: 26345

Okay, Dave, it'll be a source follower. The power switch is on the AF gain control, so the wiper is at the ground end of the resistance at turn on.

Leonard

----- Original Message -----
From: david.newkirk@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Sunday, May 08, 2016 6:55 AM
Subject: Re: [regenrx] Re: Mk.21 Mod 3c

I wrote:

> Hmm, a SPICE analysis of how much voltage temporarily appears at the junction of,
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Also for instance, assume a detector plate supply level of 250 V. So when that voltage suddenly appears at the supply end of our detector's 150-k plate load resistor, it appears across the 160-kilohm series combination of that resistor and our 10-kilohm AF GAIN control, with the interposed coupling C temporarily acting like a short circuit.

Only 10-kilohms' worth of that drop--10/160--appears across the AF GAIN control. That equates to 0.0625 times 250, or 15.625 V. That's much higher than the 0.4 V absolute maximum the LM386 can tolerate, so we need to keep it from getting to the input of the LM386. If our AF GAIN control happens to be set to zero or an intermediate value that allows no more than 0.4 V or to to be applied to the LM386, we luck out for this power-up event. If not, the LM386 input is likely damaged such that the device can't work.

Shooting from the hip, I suggested Zener diodes, at the time knowing neither the LM386's input limitations nor the magnitude of the voltage surge to expect. Considering the low (0.4 V) absolute max of the LM386 input, I think that a forward-conducting silicon diode (cathode to ground) between the AF GAIN wiper and ground is a better idea.

A 1N4148 or 1N4152 silicon switching diode (voltage drop, 0.6 to 0.7 V) should suffice. 250 V across 150 k results in only 1.7 mA of current flow, so even in the worst case the

current through the protective diode would be much lower than the part's average forward current max of 150 mA. 0.6 to 0.7 V is more than the LM386's absolute max, but it would likely provide useful protection. A germanium diode (voltage drop, 0.3 to 0.4 V) would get us closer.

In installing these diodes causes noticable audio distortion, however, it's back to the drawing board. I'm glad that tubes are more forgiving!

All of this said, BTW, we are actually overloading (in the sense of "too low a load resistance for maximum gain") the vacuum-tube stage that drives the LM386, if that stage is acting like an AF voltage amplifier with its output taken from the plate via a blocking C. For max gain, a tube so configured (as a resistance-coupled amplifier) needs to "see" a next-stage input resistance that's considerably higher than the value of its plate dropping resistor. Yet we commonly see 5 k or 10 k suggested as the AF GAIN control max resistance to use with LM38x-series AF amplifier ICs. So to best interface a tube detector or amplifier with such a lower-impedance low-voltage stage, we should interpose a cathode, source or emitter follower for impedance conversion. A cathode or source follower would be better than an emitter follower, as these can be configured to exhibit the high input resistance that the preceding vacuum-tube stage requires for maximum voltage gain.

Best regards,

Dave
amateur radio W9BRD

26346. Re: [regenrx] Re: Mk.21 Mod 3c 10v zeners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-08 17:50:55 UTC
From: Leonard Meek
Topic: 26336 Message: 26346

Rob, the 758A was not my first choice. I just happened to have a bunch of them so that's what I used.

Leonard

----- Original Message -----
From: Rob roomberg@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Saturday, May 07, 2016 4:34 PM
Subject: Re: [regenrx] Re: Mk.21 Mod 3c 10v zeners

This MK21... is this based on a radio article that explains a complete build?

I've found circuits using 5 VOLT 1N751A zeners in front of MPF102 Jfets to protect from spikes
when plugging a guitar into a pre-amp.
This MK21 Mod 3C circuit shows 10V 1N758A.
Can I substitute those 1N758A diodes with my 5 volt 1N7541A diodes or
would that let the magic smoke out of the LM386 ?
Would I hear anything different in this circuit if I used 1N7541A diodes?

On 05/07/2016 01:31 PM, 'Leonard Meek' lemeek@... [regenrx] wrote:

☐

Les, there's a voltage spike from the detector at turn on from the solid state rectifier. Dave Newkirk recommended putting zeners acros the LM386 input to protect it. I also found that there are more than one version of the '386: The LM386 N-1 is a 12V max version. The LM386 N-4 can take 18V max. Another thing I discovered was the coils I was using were the ones I originally wound on 4 pin tube bases for the regen I built back in the early '50's. I followed the instructions religeously in the magazine article, which put the tickler winding next to the grid end of the tank coil. Regen control was nervous at best. I tried my newer coils wound on standard coil forms with the tickler coil on the ground side of the tank coil, and the sensitivity is better and regen control is smoother. I think now that I've squeezed as much out of this circuit as I can, and it's time to move on.

Leonard

----- Original Message -----
From: les.au49@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Friday, May 06, 2016 7:48 PM
Subject: [regenrx] Re: Mk.21 Mod 3c

Hello Leonard: Looking at the zeners across the input to the LM386 - what do they do? Clip spikes that might kill the chip? That's Q1.

Q2. You're using a tickler (Armstrong) coil and screen grid voltage to control regeneration. How smooth? Silky smooth?

What can you hear on this?

Les

26347. Re: [regenrx] Re: Mk.21 Mod 3c 10v zeners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-08 17:52:59 UTC
From: Leonard Meek
Topic: 26336 Message: 26347

The Mk.21 was based on a circuit the appeared in one of the elecctronics magazines back in the '50's but I have been unable to locate it.

Leonard

----- Original Message -----
From: Rob roomberg@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Saturday, May 07, 2016 4:34 PM
Subject: Re: [regenrx] Re: Mk.21 Mod 3c 10v zeners

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would that let the magic smoke out of the LM386 ?
Would I hear anything different in this circuit if I used 1N7541A diodes?

On 05/07/2016 01:31 PM, 'Leonard Meek' lemeek@... [regenrx] wrote:

☐

Les, there's a voltage spike from the detector at turn on from the solid state rectifier. Dave Newkirk recommended putting zeners acros the LM386 input to protect it. I also found that there are more than one version of the '386: The LM386 N-1 is a 12V max version. The LM386 N-4 can take 18V max. Another thing I discovered was the coils I was using were the ones I originally wound on 4 pin tube bases for the regen I built back in the early '50's. I followed the instructions religeously in the magazine article, which put the tickler winding next to the grid end of the tank coil. Regen control was nervous at best. I tried my newer coils wound on standard coil forms with the tickler coil on the ground side of the tank coil, and the sensitivity is better and regen control is smoother. I think now that I've squeezed as much out of this circuit as I can, and it's time to move on.

Leonard

----- Original Message -----
From: les.au49@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Friday, May 06, 2016 7:48 PM
Subject: [regenrx] Re: Mk.21 Mod 3c

Hello Leonard: Looking at the zeners across the input to the LM386 - what do they do? Clip spikes that might kill the chip? That's Q1.

Q2. You're using a tickler (Armstrong) coil and screen grid voltage to control regeneration. How smooth? Silky smooth?

What can you hear on this?

Les

26348. Re: [regenrx] Re: Mk.21 Mod 3c 10v zeners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-09 04:35:21 UTC
From: Rob
Topic: 26336 Message: 26348

thank you

The Mk.21 was based on a circuit the appeared in one of the electronics magazines back in the '50's but I have been unable to locate it.

On 05/08/2016 01:50 PM, 'Leonard Meek' lemeek@... [regenrx]
wrote:
>
> □
>
> Rob, the 758A was not my first choice. I just happened to have a bunch
> of them so that's what I used.
> Leonard
>
> ----- Original Message -----
> *From:* Rob roomberg@... [regenrx]
> <mailto:roomberg@...%20[regenrx]>
> *To:* regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>
> *Sent:* Saturday, May 07, 2016 4:34 PM
> *Subject:* Re: [regenrx] Re: Mk.21 Mod 3c 10v zeners
>
> This MK21... is this based on a radio article that explains a
> complete build?
>
> I've found circuits using 5 VOLT 1N751A zeners in front of MPF102
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> when plugging a guitar into a pre-amp.
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> Can I substitute those 1N758A diodes with my 5 volt 1N7541A diodes or
> would that let the magic smoke out of the LM386 ?
> Would I hear anything different in this circuit if I used 1N7541A
> diodes?
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>
>
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> On 05/07/2016 01:31 PM, 'Leonard Meek' lemeek@...
> [regenrx] wrote:
>>
>> □
>>
>> Les, there's a voltage spike from the detector at turn on from

>> the solid state rectifier. Dave Newkirk recommended putting
>> zeners acros the LM386 input to protect it. I also found that
>> there are more than one version of the '386: The LM386 N-1 is a
>> 12V max version. The LM386 N-4 can take 18V max. Another thing I
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>> wound on 4 pin tube bases for the regen I built back in the early
>> '50's. I followed the instructions religeously in the magazine
>> article, which put the tickler winding next to the grid end of
>> the tank coil. Regen control was nervous at best. I tried my
>> newer coils wound on standard coil forms with the tickler coil on
>> the ground side of the tank coil, and the sensitivity is better
>> and regen control is smoother. I think now that I've squeezed as
>> much out of this circuit as I can, and it's time to move on.
>> Leonard
>>
>> ----- Original Message -----
>> *From:* les.au49@... [regenrx]
>> <mailto:les.au49@...%20[regenrx]>
>> *To:* regenrx@yahoogroups.com
>> *Sent:* Friday, May 06, 2016 7:48 PM
>> *Subject:* [regenrx] Re: Mk.21 Mod 3c
>>
>> Hello Leonard: Looking at the zeners across the input to the
>> LM386 - what do they do? Clip spikes that might kill the
>> chip? That's Q1.
>>
>> Q2. You're using a tickler (Armstrong) coil and screen grid
>> voltage to control regeneration. How smooth? Silky smooth?
>>
>> What can you hear on this?
>>
>> Les
>>
>
>

26349. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-09 23:15:18 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 26349

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Leonard's Stuff/Mk. 21 Mod 3d.bmp
Uploaded by : leonardmeek <lemeek@...>
Description : Last final upgrade.

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Leonard%27s%20Stuff/Mk.%2021%20Mod%203d.bmp

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

leonardmeek <lemeek@...>

26350. Mk.21 Mod 3d

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-09 23:32:15 UTC
From: Leonard Meek
Topic: 26350 Message: 26350

And now for something entirely different.

I just uploaded the final upgrade of my Mk.21. Dave Newkirk recommended a source follower between the detector and the LM386 chip, so I threw one together (litterally) and stuck it into the underside of the chassis. It made quite a difference. The selectivity has improved, and this evening I'll find out how it works with both sets of coils. Right now it's a one tube, one transistor, one IC hybrid set. I guess I'm cheating a little, but you can't argue with success. I scoped the input and didn't see any voltage spikes over a few millivolts at turnon so I omitted the zeners. Time will tell if that's a prudent move.

Leonard

26351. Re: Mk.21 Mod 3d

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-10 01:04:15 UTC
From: david.newkirk@...
Topic: 26350 Message: 26351

Leonard wrote:

> recommended a source follower between the detector and the LM386 chip,
> so I threw one together (litterally) and stuck it into the underside of the chassis.
> It made quite a difference. The selectivity has improved, and this evening I'll
> find out how it works with both sets of coils. Right now it's a one tube,
> one transistor, one IC hybrid set. I guess I'm cheating a little, but you
> can't argue with success.

Hybrids are fun, and push the envelope! My current fave set, the BGCD Regenerodyne, uses a 12A6-2N7000 mixer switched by a 2N3904 Pierce crystal oscillator, as well as a 2N7000-as-variable-shunt-resistor RF GAIN control.

As an initial guess as to why the source follower may improve selectivity, that may be because the higher input impedance of the source follower, in parallel with the 200-k plate load resistor of the 6AK5, make a significantly higher AF impedance at the plate of the 6AK5. That allows the 470-pF RF bypass C to roll off audio highs to a relatively greater degree.

I heard exactly this effect when experimenting with different detectors in the BGCD. With a 560-pF plate bypass C, I heard noticeably more high-end rolloff with a 12A8 pentagrid product detector (plate resistance on the order of 360 k) than with a 6GX6 dual-control pentode (plate R on the order of 140 k). The 12A6 Hartley is even better, for two reasons: its plate R is even lower (on the order of 70 k) _and_ its regeneration gives it significant selectivity of gain that non-regenerative circuits can't provide.

You should also be getting somewhat higher output from the 6AK5 from the same cause: A higher AF load Z for the detector should let it develop a somewhat higher maximum output voltage. Higher gain in the AF passband you want combined with relatively lower gain at the higher audio frequencies you don't want should result in quite an improved sound.

Best regards,

Dave
amateur radio W9BRD

26352. Re: [regenrx] Re: Mk.21 Mod 3d

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-10 01:35:16 UTC
From: Leonard Meek
Topic: 26350 Message: 26352

Thanks, Dave. I was sure the increased gain and selectivity was because of the higher impedance load on the detector. This configuration may show up in future projects.

Leonard

----- Original Message -----
From: david.newkirk@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Monday, May 09, 2016 3:04 PM
Subject: [regenrx] Re: Mk.21 Mod 3d

Leonard wrote:

> recommended a source follower between the detector and the LM386 chip,
> so I threw one together (litterally) and stuck it into the underside of the chassis.
> It made quite a difference. The selectivity has improved, and this evening I'll
> find out how it works with both sets of coils. Right now it's a one tube,
> one transistor, one IC hybrid set. I guess I'm cheating a little, but you
> can't argue with success.

Hybrids are fun, and push the envelope! My current fave set, the BGCD Regenerodyne, uses a 12A6-2N7000 mixer switched by a 2N3904 Pierce crystal oscillator, as well as a 2N7000-as-variable-shunt-resistor RF GAIN control.

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You should also be getting somewhat higher output from the 6AK5 from the same cause: A higher AF load Z for the detector should let it develop a somewhat higher maximum output voltage. Higher gain in the AF passband you want combined with relatively lower gain at the higher audio frequencies you don't want should result in quite an improved sound.

Best regards,

Dave
amateur radio W9BRD

26353. FS: Two Scopes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-10 11:46:21 UTC
From: Bry Carling
Topic: 26353 Message: 26353

FOR SALE: two oscilloscopes.

Tektronix 222 portable in excellent shape with carry case. This is a small, modern scope in excellent condition that was owned by a calibration engineer. What is it worth please?

Also have a Tektronix 310 portable scope. This is larger but still a modest sized scope, also in great shape. What is it worth please?

Pictures available.

Sincerely,
Brian Carling, AF4K

26354. Re: FS: Two Scopes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-11 03:16:36 UTC
From: les.au49@...
Topic: 26353 Message: 26354

Hello Bry,

You might try to be more precise, as there are two model "310" CROs from H.P.
One is a vintage analog animal, probably good to 10 MHz. The second is a digital beast, good to 50MHz.

The second sells from US$200 to $350.

Les

26355. Re: Mk.21 Mod 3d

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-11 09:08:50 UTC
From: qrp.gaijin@...
Topic: 26350 Message: 26355

In regenrx@yahoogroups.com, <david.newkirk@...> wrote :

> Hybrids are fun, and push the envelope! My current fave set, the
> BGCD Regenerodyne, uses a 12A6-2N7000 mixer switched by a
> 2N3904 Pierce crystal oscillator, as well as a
> 2N7000-as-variable-shunt-resistor RF GAIN control.

Could you provide a schematic of your 2n7000-as-variable-shunt-resistor RF gain control?

I am attempting to design a regenerative receiver that is purely controlled by voltages. I know how to control the regeneration via voltage (easiest way is to control the detector Vcc; another way is a varactor as a "throttle capacitor"), and how to control the tuning via voltage (use a varactor to tune the tank).

What I don't know how to do (easily) is make a linear, voltage-controlled RF attenuator. Altering bias of an RF preamp is out, as that will encourage IMD in the preamp at low gain levels. I sketched up an attenuator design using several PIN diodes, but that was too complex for my taste. I always thought there must be a good way to use a FET for this purpose but couldn't come up with a circuit that seemed plausible and had a wide dynamic range.

Because you mentioned "hybrids", you can probably guess at my ulterior motive for attempting to design a regenerative receiver that is purely controlled by voltages.

Best regards,
qrp.gaijin@yahoo.com
http://qrp-gaijin.blogspot.com http://qrp-gaijin.blogspot.com

26356. Re: [regenrx] Re: Mk.21 Mod 3d

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-11 10:00:14 UTC
From: Tom Lee
Topic: 26350 Message: 26356

I should add that the most convenient way to implement this strategy is with a resistor from drain to gate, and an equal-value resistor from gate to the control voltage. This arrangement assumes that the source terminal is grounded, which then allows the control voltage to be ground-referenced, rather than floating (as would be implied by a literal translation of the description given earlier).

--Cheers,
Tom

--
Prof. Thomas H. Lee
Allen Bldg. Rm.205
420 Via Palou Mall
Stanford University
Stanford, CA 94305-4070
http://www-smirc.stanford.edu

On 5/11/2016 2:40 AM, Tom Lee wrote:
> A couple of quick comments:
>
> When you vary the supply voltage, you are also varying the current, so
> calling this a voltage control method is somewhat arbitrary (and may
> possibly obscure important dependencies).
>
> That aside, the standard way to use a FET as a fairly linear
> voltage-controlled resistor is to add half of VDS to the control
> voltage, and apply that sum as VGS. The drain-source resistance will
> then remain approximately constant over a much greater VDS range than
> a standard triode-operated FET.
>
> At low frequencies, you may derive the half-VDS voltage through a
> simple resistive divider across drain and source. At higher
> frequencies, you will need to drive the divider with a buffered
> version of the drain voltage (to allow use of lower-valued resistors,
> and thus smaller RC time constants formed with inevitable parasitics).
>
> --Cheers,
> Tom
> --
> Prof. Thomas H. Lee
> Allen Bldg. Rm.205
> 420 Via Palou Mall
> Stanford University
> Stanford, CA 94305-4070
> http://www-smirc.stanford.edu

> On 5/11/2016 2:08 AM, qrp.gaijin@... [regenrx] wrote:
>> In regenrx@yahoogroups.com, <david.newkirk@...> wrote :
>>
>> > Hybrids are fun, and push the envelope! My current fave set, the
>> > BGCD Regenerodyne, uses a 12A6-2N7000 mixer switched by a
>> > 2N3904 Pierce crystal oscillator, as well as a
>> > 2N7000-as-variable-shunt-resistor RF GAIN control.
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>> Could you provide a schematic of your
>> 2n7000-as-variable-shunt-resistor RF gain control?
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>> I am attempting to design a regenerative receiver that is purely
>> controlled by voltages. I know how to control the regeneration via
>> voltage (easiest way is to control the detector Vcc; another way is a
>> varactor as a "throttle capacitor"), and how to control the tuning
>> via voltage (use a varactor to tune the tank).
>>
>> What I don't know how to do (easily) is make a linear,
>> voltage-controlled RF attenuator. Altering bias of an RF preamp is
>> out, as that will encourage IMD in the preamp at low gain levels. I
>> sketched up an attenuator design using several PIN diodes, but that
>> was too complex for my taste. I always thought there must be a good
>> way to use a FET for this purpose but couldn't come up with a circuit
>> that seemed plausible and had a wi de dynamic range.
>>
>> Because you mentioned "hybrids", you can probably guess at my
>> ulterior motive for attempting to design a regenerative receiver that
>> is purely controlled by voltages.
>>
>> Best regards,
>> qrp.gaijin@...
>> http://qrp-gaijin.blogspot.com
>>
>>
>

26357. Re: [regenrx] Re: Mk.21 Mod 3d

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-11 09:40:42 UTC
From: Tom Lee
Topic: 26350 Message: 26357

A couple of quick comments:

When you vary the supply voltage, you are also varying the current, so calling this a voltage control method is somewhat arbitrary (and may possibly obscure important dependencies).

That aside, the standard way to use a FET as a fairly linear voltage-controlled resistor is to add half of VDS to the control voltage, and apply that sum as VGS. The drain-source resistance will then remain approximately constant over a much greater VDS range than a standard triode-operated FET.

At low frequencies, you may derive the half-VDS voltage through a simple resistive divider across drain and source. At higher frequencies, you will need to drive the divider with a buffered version of the drain voltage (to allow use of lower-valued resistors, and thus smaller RC time constants formed with inevitable parasitics).

--Cheers,
Tom

--
Prof. Thomas H. Lee
Allen Bldg. Rm.205
420 Via Palou Mall
Stanford University
Stanford, CA 94305-4070
http://www-smirc.stanford.edu

On 5/11/2016 2:08 AM, qrp.gaijin@... [regenrx] wrote:
> In regenrx@yahoogroups.com, <david.newkirk@...> wrote :
>
> > Hybrids are fun, and push the envelope! My current fave set, the
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> What I don't know how to do (easily) is make a linear,
> voltage-controlled RF attenuator. Altering bias of an RF preamp is
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> qrp.gaijin@...
> http://qrp-gaijin.blogspot.com
>
>

26358. Re: Mk.21 Mod 3d

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-11 11:12:29 UTC
From: david.newkirk@...
Topic: 26350 Message: 26358

qrp.gaijin wrote:

> Could you provide a schematic of your 2n7000-as-variable-shunt-resistor RF gain control?

I'll get a schematic of my approach up on my site somewhere so I can link it in. It's pretty cheesy--basically just use the FET as a shunt R to common--but it works well enough for me.

MOSFET have sharp threshold knees, so linearization of the FET transfer characteristic really helps expand the resistance-v-control-rotation characteristic of the system. Tom has well described how to do this--it's _really_ simple, two resistors, one of which provides drain-to-gate feedback; so you can see a drawing soon, see Figure 6 in http://www.vishay.com/docs/70598/70598.pdf http://www.vishay.com/docs/70598/70598.pdf .

I first ran into this linearization technique in Horowitz and Hill's _The Art of Electronics_. I found another cool use for it: Implement a simple S-meter for a receiver (Yaesu FR-101S) with a positive AGC bus. Just linearize a 2N7000 and connect it across the meter as a shunt, using a dropping resistor from supply to the meter to set "max." Do a bit more fiddling to bias the FET threshold and control the FET bias from the AGC line, and then at AGC max the meter is maximally shunted, and as AGC voltage drops with rising signal voltage the meter is shunted less and indicates more. The result is a meter with a hot low end and a compressed strong-signal end. (I also designed and breadboarded a serious level-shifting, op-amp-summer-based equivalent that has zero and max set, linear range, blah blah blah, but the simple FET thang works so well [and I so consider S meters to be _so_ non-indicative of anything really important], that I keep not getting around to building the higher-tech version. _Radio_ is more fun.

And course feedback can help out with other MOSFET applications. It turns out that just a bit of _capacitive_ drain-to-gate feedback around a big, high-voltage power MOSFET makes it a peachy cathode keyer with nice smooth rise and fall edges. Because of the high transconductance of these parts, that's with just (for me, who likes things a little soft) 560 pF from drain to gate; with 0.001 uF or more and you can approach the bong of primary keying a la W2AN. A separate FET per keyed stage avoids common-impedance situations that may make for interstage-enhanced nonfun with various sorts of parasitic oscillations, including those made possible (in beam tubes) by screen and plate intrinsic negative resistance.

Best regards,

Dave
amateur radio W9BRD

26359. Can anyone identify what article this 6V6GT 6SK7 5Y3GT station came from?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-11 16:51:14 UTC
From: Rob
Topic: 26359 Message: 26359

Can anyone identify what article this 6V6GT 6SK7 5Y3GT station came from?

On 05/11/2016 07:56 AM, JJ wrote:
> I'm kinda in the same boat. At Nearfest a couple of weeks ago I
> picked up a homebrew matching 1 tube transmitter, 1 tube regen and
> power supply with coils for 80 & 40M. The seller said that he had
> built it from a magazine article that he couldn't remember. "Possibly
> CQ." He said the single article had all three pieces. But I suppose
> it could also had been a series of 2 or 3 articles.
> I've burned out my Google Fu trying to find anything. I even
> subscribed to the CQ mag archives with no luck.
> The transmitter has a 6V6GT, receiver a 6SK7 & PS a 5Y3GT.
> 73,
> Jon
> WS1K
>
>
>> Back in the mid 1960's I built a homebrew QRP transmitter using a
6AW8A miniature tube. I have long since lost the schematic, but it came
from a magazine which may have been "Radio-TV Experimenter", "Popular
Electronics" or a similar publication. If any of you QRPers know of
leads for finding the article, it would be greatly appreciated.
>>
>>
>> 72, Gene, N5GW
> _____
> QRP-L mailing list
> Home: http://mailman.qth.net/mailman/listinfo/qrp-l

26360. RE: [regenrx] Can anyone identify what article this 6V6GT 6SK7 5Y3GT station came from?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-11 17:07:35 UTC
From: Hubert Miller
Topic: 26359 Message: 26360

If you mean three pieces, i’d say except for the 6SK7 tube, it’s a copy of the Walter Ashe kits described in two 1950s RADIO NEWS magazine articles.

I have seen a whole lot of build – it articles and books, and i have never seen a single tube 6SK7 receiver used paired with a transmitter. 6SN7 yes.

So i’m wondering if the builder extemporized on his own here.

What is the size of the chassis? That may be a clue also, as the build articles specified the chassis size also.

-Hue Miller

>Sent: Wednesday, May 11, 2016 9:51 AM
Can anyone identify what article this 6V6GT 6SK7 5Y3GT station came from?

On 05/11/2016 07:56 AM, JJ wrote:
> I'm kinda in the same boat. At Nearfest a couple of weeks ago I
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> The transmitter has a 6V6GT, receiver a 6SK7 & PS a 5Y3GT.
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26361. Re: [regenrx] Can anyone identify what article this 6V6GT 6SK7 5Y3GT station came from?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-11 17:46:16 UTC
From: Prof. Arnaldo Coro Antich
Topic: 26359 Message: 26361

6SK7.... very nice metal encased tube ... used by the PARASET
and many other nice designs...
Modified PARASET here used 6SK7 regenerative detector,
6SK7 (OR 6SJ7) AUDIO PREAMP AND 6V6 Audio power output...
Room filling volume ... nice AM broadcast band reception optimized
by feedback loop from 6V6 to 6SK7/6SJ7 audio preamp...
Could had been better optimized by adding a 6SK7 triode connected
as grounded grid RF amplifier stage...
Using now my favorite Soviet era 7 pin and 9 pin miniature tubes
this radio would be 6AK5/5654/6ZHE1P triode connected grounded
grid RF stage, another one as screen grid controlled regenerative
detector... another one as audio preamp... or a triode/tetrode
audio tube 6PHI5P... (beefed up ECL82/6BM8...
Run them with no more than 130/ max 150 volts... regulated at
105 or 75 for the detector stage... Go for 6.0 to 6.4 volts regulated
DC for the filaments and make the power supply pack built on
another chassis.. (makes a very useful workshop accessory too)
When builders follow my circuit design... I recommend to start by
winding the AM broadcast band coil... just to show how sensitive
this radio is... Daytime razor sharp adjacent channel separation
possible to pick up a 940 kHz station 220 miles away with the
presence of very well modulated 10 kW local on 950 kHz...
Bandspread coils for the ham bands... and using a second slow
motion 20 pF variable capacitor from defunct FM tuner makes this
design a very viable second ham station receiver for those who
already own a nice radio, and it does work quite well as a main
station receiver if you don't have a good radio already...
SSB , CW and digital modes reception is excellent... BUT remember
to build the regenerative detector stage like a good quality VFO
and use the best possible air spaced variable capacitor and
dial mechanism...
Just getting parts together here for assembling another one for
a disabled radio amateur... that I am sure she will enjoy using
it at her station...
BTW... absolutely NO critical parts ... many values can be below
or above recommended parts values and the radio will still work...
something important for those living in parts of the world that
can not access E ¨port¨ or buy from Internet sources...

73 and DX
Arnie Coro
CO2KK
Host of Dxers Unlimited
NOTE: 7 pins and 9 pins miniature tube sockets may prove

to be hard to find... but you can insert the tubes into little
holes on a printed circuit board, and solder directly to the
tube pins, because those tubes are very long lasting... HI HI

On 11/05/16 13:07, Hubert Miller kargo_cult@... [regenrx] wrote:
>
>
> If you mean three pieces, i’d say except for the 6SK7 tube, it’s a
> copy of the Walter Ashe kits described in two 1950s RADIO NEWS
> magazine articles.
>
> I have seen a whole lot of build – it articles and books, and i have
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26362. RE: [regenrx] Can anyone identify what article this 6V6GT 6SK7 5Y3GT station came from?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-11 17:13:12 UTC
From: Hubert Miller
Topic: 26359 Message: 26362

My guess on this one is 73 Magazine. PE is a good second guess.
I’m pretty much through with my magazine collection downsizing, so coming across these articles
again is less likely, but if i see them again, i'll note it. I donated many lbs. of magazines to
americanradiohistory.com and many to hamfests, and the local recycling center, but i tried to
log interesting articles as i did, but just not enough time to do a thorough job.
-Hue

>> Back in the mid 1960's I built a homebrew QRP transmitter using a
6AW8A miniature tube. I have long since lost the schematic, but it came
from a magazine which may have been "Radio-TV Experimenter", "Popular
Electronics" or a similar publication. If any of you QRPers know of
leads for finding the article, it would be greatly appreciated.
>>
>>
>> 72, Gene, N5GW

–’---

26363. 2.5v Filament Tubes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-11 22:30:23 UTC
From: J Ed
Topic: 26363 Message: 26363

I'm looking to build a tube receiver and it will likely use low voltages for the plates. I'm deciding if I want to use miniature all glass tube or some of the older 2.5v filament tubes. I have four 27s, four 35/51s, a 24A, and two 47s (possibly working for a small transmitter?). The receiver would have to have four tubes with filaments in series.

It's possible a tube collector could want these tubes and would buy them from me. Then I would have my choice made for me. I have some 6EH7s that have tremendous gain. I'm also concerned that two 35 and two 27s would not have much gain unless I cranked the plate supply up to 45 volts or more. That's doable in the age of inexpensive boost converters.

Has anyone else used tubes like this to make a receiver? How did it compare to receivers made with more modern tubes? It's possible I could make a simple superheterodyne receiver for a single band (something like 80 or even 40m). I'd just have to be careful about the layout.

Ed AE7TE

26364. Re: 2.5v Filament Tubes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-12 01:42:46 UTC
From: david.newkirk@...
Topic: 26363 Message: 26364

Ed wrote:

> I'm also concerned that two 35 and two 27s would not have much gain unless I cranked the plate supply
> up to 45 volts or more. That's doable in the age of inexpensive boost converters.

Uh...or by using a power transformer that puts out, say, 56 V. You can buy them for Digi-Key.

> Has anyone else used tubes like this to make a receiver? How did it compare to receivers made with
> more modern tubes?

George Grammer described in December 1930 QST a widely-duplicated a.c. operated regen that used a 24A detector followed by a 27 AF amplifier. In its writeup he mentioned that it really needed an AF GAIN control.

In September 1931 QST, James Millen described the design of the National SW-3 regen. It used a 35 as its detector.

We got to this point because those tubes worked so well in those applications then. They'll still work fine now.

Best regards,

Dave
amateur radio W9BRD

26365. Re: [regenrx] 2.5v Filament Tubes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-11 23:12:00 UTC
From: Leonard Meek
Topic: 26363 Message: 26365

Ed, I don't know if this will help, but My Mk.9 regen receiver used all 2.5V tubes. In my case I got a transformer from Radio Daze (I think) that had 2.5 and 5.0 volt windings. Four tubes are connected in parallel on the 2.5V winding and two are in series on the 5.0V winding. The set works well enough, but the old tubes tend to be a little microphonic. Also, I prefer high voltages and don't know how these tubes would work on low voltage.

Leonard

----- Original Message -----
From: J Ed jedwardsat1@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Wednesday, May 11, 2016 12:30 PM
Subject: [regenrx] 2.5v Filament Tubes

I'm looking to build a tube receiver and it will likely use low voltages for the plates. I'm deciding if I want to use miniature all glass tube or some of the older 2.5v filament tubes. I have four 27s, four 35/51s, a 24A, and two 47s (possibly working for a small transmitter?). The receiver would have to have four tubes with filaments in series.

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Ed AE7TE

26366. Vacuum tube experimenter board

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-12 02:56:58 UTC
From: Rob
Topic: 26366 Message: 26366

I stumbled onto this vacuum tube experimenter board:

http://www.learnmorsecode.com/regen/exp/exp3.jpg

on
http://www.ak-modul-bus.de/cgi-bin/iboshop.cgi?showd930!0,719892259480343,KITRT100

under Dokumentation

found a PDF in English

http://www.ak-modul-bus.de/cat/documentation/RT100_en.pdf

that had great explanations of how to build tube circuits.

check out these 3 images:
the board:
http://www.learnmorsecode.com/regen/exp/exp3.jpg

a circuit:
http://www.learnmorsecode.com/regen/exp/exp1.jpg

How to wind the shortwave coil:
http://www.learnmorsecode.com/regen/exp/exp2.jpg

Can anyone recommend a tube based experimenter board like this one?
This is the first one I ever saw and the web site is in German so I'm not
understanding much there.

26367. Re: [regenrx] 2.5v Filament Tubes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-12 03:44:39 UTC
From: tbs50a@...
Topic: 26363 Message: 26367

Hi Ed
You mention that you would have to use 4 tubes in series are you thinking that you can use a 6.3v filament transformer to power the heaters?? Remember that the current of each must be the same in order to do this. If you are going to use a 47 tube it is directly heated (no cathode) so the 2.5v filament winding must have a center tap in order to act as the cathode connection. If you are sold on using the 2.5v tubes a 2A5 is a good choice for the audio output.
In regards to using modern hi gain tubes generally speaking you don't need a lot of gain in the detector stage. You may find that it might be hard to tame. Audio gain is a good thing if you are driving a speaker, for fones don't need a bunch.
Not sure about using low voltage on the plates. On triode detectors I've used around 35-45v on the plate and wound the feedback winding accordingly. Dave mentioned the SW-3 it uses 35 tubes but runs about 200vdc on the plate and controls the regeneration with 20v (0-36vdc) on the screen grid.
Just a few thoughts
Terry N3GTE

-----Original Message-----
From: 'Leonard Meek' lemeek@... [regenrx] <regenrx@yahoogroups.com>
To: regenrx <regenrx@yahoogroups.com>
Sent: Wed, May 11, 2016 10:33 pm
Subject: Re: [regenrx] 2.5v Filament Tubes

☐
Ed, I don't know if this will help, but My Mk.9 regen receiver used all 2.5V tubes. In my case I got a transformer from Radio Daze (I think) that had 2.5 and 5.0 volt windings. Four tubes are connected in parallel on the 2.5V winding and two are in series on the 5.0V winding. The set works well enough, but the old tubes tend to be a little microphonic. Also, I prefer high voltages and don't know how these tubes would work on low voltage.

Leonard

----- Original Message -----

From: J Ed jedwardsat1@... [regenrx]

To: regenrx@...m

Sent: Wednesday, May 11, 2016 12:30 PM

Subject: [regenrx] 2.5v Filament Tubes

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Has anyone else used tubes like this to make a receiver? How did it compare to receivers made with more modern tubes? It's possible I could make a simple superheterodyne receiver for a single band (something like 80 or even 40m). I'd just have to be careful about the layout.

Ed AE7TE

26368. Re: [regenrx] 2.5v Filament Tubes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-12 03:53:58 UTC
From: J Ed
Topic: 26363 Message: 26368

I was looking at 56v transformers as suggested by another guy here. They are decent in price and I'd like to get one for a small receiver supply. Still, the 2.5v tube seem to be too much trouble and I think I'll sell the ones I have. The 56v transformer will give 80v and likely will do 95 to 100 if lightly loaded.

A 24A uses 1.75A for the heater, which is a tad over 4 watts. A 6AU6 uses 1.9 watts for the heater. This means I can get twice as many tubes on the same A supply. There are many transformers that do 12.6v center tapped. These transformers will be great for powering filaments. I am not sure what I want to do but I had IF amplification in mind.

My original thought was to run four of these tubes with their filaments in series (adding up to 10v) and placing in a small resistor made of Kanthal wire to use up the remaining volts. I've also thought of making a rheostat with said wire for making a twin plex receiver using a battery tube.

Ed AE7TE
On May 11, 2016 10:44 PM, "tbs50a@... [regenrx]" <
regenrx@yahoogroups.com> wrote:

>
>
> Hi Ed
> You mention that you would have to use 4 tubes in series are you thinking
> that you can use a 6.3v filament transformer to power the heaters??
> Remember that the current of each must be the same in order to do this. If
> you are going to use a 47 tube it is directly heated (no cathode) so the
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> connection. If you are sold on using the 2.5v tubes a 2A5 is a good choice
> for the audio output.
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> Just a few thoughts
> Terry N3GTE
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> -----Original Message-----
> From: 'Leonard Meek' lemeek@... [regenrx] <

> regenrx@yahoogroups.com>
> To: regenrx <regenrx@yahoogroups.com>
> Sent: Wed, May 11, 2016 10:33 pm
> Subject: Re: [regenrx] 2.5v Filament Tubes
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>
> *Leonard*
>
>
> ----- Original Message -----
> *From:* J Ed jedwardsat1@gmail.com [regenrx]
> <jedwardsat1@...+[regenrx]>
> *To:* regenrx@yahoogroups.com
> *Sent:* Wednesday, May 11, 2016 12:30 PM
> *Subject:* [regenrx] 2.5v Filament Tubes
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> That's doable in the age of inexpensive boost converters.
> Has anyone else used tubes like this to make a receiver? How did it
> compare to receivers made with more modern tubes? It's possible I could
> make a simple superheterodyne receiver for a single band (something like 80
> or even 40m). I'd just have to be careful about the layout.
> Ed AE7TE
>
>
>

26369. Bending Plywood

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-12 17:30:57 UTC
From: J Ed
Topic: 26369 Message: 26369

I've determined that the 2.5v tube will be a no go. I do want to try something else, though. I'd like to make a receiver that goes inside a wooden cabinet. That's nothing new, as receiver cabinets are commonly and easily made from wood. I'd like to make mine a cathedral cabinet shape, though.

To do this, I'll need to know how to bend plywood into the shape of an arch. I have seen methods that involve soaking the wood, steaming it, etc. I'd also like for my cabinet to have a vintage look, meaning I'd rather not use MDF or plastic. Still, I'm learning a new skill and have to be open to new ideas.

Ed AE7TE

26371. RE: [regenrx] Bending Plywood

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-12 18:13:35 UTC
From: Larry
Topic: 26369 Message: 26371

I would suspect plywood would not be the way to go, Maybe door skin, which is very thin plywood.

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Thursday, May 12, 2016 1:31 PM
To: regenrx@yahoogroups.com
Subject: [regenrx] Bending Plywood

I've determined that the 2.5v tube will be a no go. I do want to try something else, though. I'd like to make a receiver that goes inside a wooden cabinet. That's nothing new, as receiver cabinets are commonly and easily made from wood. I'd like to make mine a cathedral cabinet shape, though.

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Ed AE7TE

26372. RE: [regenrx] Bending Plywood

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-12 18:22:13 UTC
From: J Ed
Topic: 26369 Message: 26372

That's a good idea too. I can stand to do several layers. One thing that occurred to me would be to make a panel from 2x4s sliced to 1/4in or thinner on the table saw. I'll probably make a small cabinet to house a small speaker and then make a bigger one capable of housing a full radio. It might be a sin to place 60s tubes in a 30s cabinet. Oh well.

See? This is why I asked this group. I'm already getting lots of good ideas.

Ed AE7TE
On May 12, 2016 1:13 PM, "'Larry' lbeaty@... [regenrx]" <
regenrx@yahoogroups.com> wrote:

>
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> which is very thin plywood.
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> *To:* regenrx@yahoogroups.com
> *Subject:* [regenrx] Bending Plywood
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> though.
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> arch. I have seen methods that involve soaking the wood, steaming it, etc.
> I'd also like for my cabinet to have a vintage look, meaning I'd rather not
> use MDF or plastic. Still, I'm learning a new skill and have to be open to
> new ideas.
>
> Ed AE7TE
>
>
>

26373. Re: [regenrx] Bending Plywood

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-12 18:25:17 UTC
From: Bill Cromwell
Topic: 26369 Message: 26373

Hi,

Is that called 'luan'?

73,

Bill KU8H

On 05/12/2016 02:13 PM, 'Larry' lbeaty@... [regenrx] wrote:
>
> I would suspect plywood would not be the way to go, Maybe door skin,
> which is very thin plywood.
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> have to be open to new ideas.
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> Ed AE7TE
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>

--
"Intelligence from the internet is unreliable because we cannot verify it's accuracy nor the author's credentials."

- Julius Caesar

26374. Re: [regenrx] Bending Plywood

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-12 18:34:59 UTC
From: Bill Cromwell
Topic: 26369 Message: 26374

Maybe you can disguise the 60s tubes to resemble 30s tubes. Papier mache
will probably not do the job...

73,

Bill KU8H

On 05/12/2016 02:22 PM, J Ed jedwardsat1@... [regenrx] wrote:
>
> That's a good idea too. I can stand to do several layers. One thing
> that occurred to me would be to make a panel from 2x4s sliced to 1/4in
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> [mailto:regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>]
> *Sent:* Thursday, May 12, 2016 1:31 PM
> *To:* regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>
> *Subject:* [regenrx] Bending Plywood
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> learning a new skill and have to be open to new ideas.
>

> Ed AE7TE
>
>

--
"Intelligence from the internet is unreliable because we cannot verify it's accuracy nor the author's credentials."

- Julius Caesar

26375. Re: [regenrx] Bending Plywood

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-12 18:35:36 UTC
From: Richard
Topic: 26369 Message: 26375

Don't need steam. You can use a "bending iron" which is basically a hot pipe. The hot pipe softens lignin in the wood and you can easily form it to the desired radius. This is how violins, guitars, and other stringed instruments are formed. Works fine with thin sections.

Richard, AA1P

On 05/12/2016 01:30 PM, J Ed jedwardsat1@... [regenrx] wrote:
>
> I've determined that the 2.5v tube will be a no go. I do want to try
> something else, though. I'd like to make a receiver that goes inside a
> wooden cabinet. That's nothing new, as receiver cabinets are commonly
> and easily made from wood. I'd like to make mine a cathedral cabinet
> shape, though.
>
> To do this, I'll need to know how to bend plywood into the shape of an
> arch. I have seen methods that involve soaking the wood, steaming it,
> etc. I'd also like for my cabinet to have a vintage look, meaning I'd
> rather not use MDF or plastic. Still, I'm learning a new skill and
> have to be open to new ideas.
>
> Ed AE7TE
>
>

26377. Re: [regenrx] Bending Plywood

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-12 18:48:11 UTC
From: Bill Cromwell
Topic: 26369 Message: 26377

I'm glad I have this off topic thread on my hard drive! I want to do some of this kind of thing too and not all of it is for radios!

73,

Bill KU8H

On 05/12/2016 02:35 PM, Richard brunneraa1p@... [regenrx] wrote:
>
> Don't need steam. You can use a "bending iron" which is basically a
> hot pipe. The hot pipe softens lignin in the wood and you can easily
> form it to the desired radius. This is how violins, guitars, and other
> stringed instruments are formed. Works fine with thin sections.
>
> Richard, AA1P
>
>
> On 05/12/2016 01:30 PM, J Ed jedwardsat1@... [regenrx] wrote:
>
>> I've determined that the 2.5v tube will be a no go. I do want to try
>> something else, though. I'd like to make a receiver that goes inside
>> a wooden cabinet. That's nothing new, as receiver cabinets are
>> commonly and easily made from wood. I'd like to make mine a cathedral
>> cabinet shape, though.
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>> an arch. I have seen methods that involve soaking the wood, steaming
>> it, etc. I'd also like for my cabinet to have a vintage look, meaning
>> I'd rather not use MDF or plastic. Still, I'm learning a new skill
>> and have to be open to new ideas.
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>> Ed AE7TE
>>
>>
>
>

--
"Intelligence from the internet is unreliable because we cannot verify it's accuracy nor the author's credentials."

- Julius Caesar

26378. RE: [regenrx] Bending Plywood

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-12 18:54:45 UTC
From: Larry
Topic: 26369 Message: 26378

There is some connection there. I kinda thought Luan was the outside wood used for attractiveness. But you may be right, it could be called Luan.

Larry

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Thursday, May 12, 2016 2:25 PM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Bending Plywood

Hi,

Is that called 'luan'?

73,

Bill KU8H

On 05/12/2016 02:13 PM, 'Larry' lbeaty@... [regenrx] wrote:
>
> I would suspect plywood would not be the way to go, Maybe door skin,
> which is very thin plywood.
>
> *From:*regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
> *Sent:* Thursday, May 12, 2016 1:31 PM
> *To:* regenrx@yahoogroups.com
> *Subject:* [regenrx] Bending Plywood
>
> I've determined that the 2.5v tube will be a no go. I do want to try
> something else, though. I'd like to make a receiver that goes inside a
> wooden cabinet. That's nothing new, as receiver cabinets are commonly
> and easily made from wood. I'd like to make mine a cathedral cabinet
> shape, though.
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> To do this, I'll need to know how to bend plywood into the shape of an
> arch. I have seen methods that involve soaking the wood, steaming it,
> etc. I'd also like for my cabinet to have a vintage look, meaning I'd
> rather not use MDF or plastic. Still, I'm learning a new skill and
> have to be open to new ideas.
>
> Ed AE7TE
>
>

--
"Intelligence from the internet is unreliable because we cannot verify it's accuracy nor the author's credentials."

- Julius Caesar

26381. Re: [regenrx] Bending Plywood

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-12 19:54:59 UTC
From: Ant Buz
Topic: 26369 Message: 26381

Bending ply (wacky wood) is sold in 1/8" and 3/8" thickness. The 3/8" is quite rough and the 1/8" is nice and smooth. Try finding a local cabinet shop to see if they have any cutoffs you have and could use. You will need to make a simple form to glue a couple of pieces together to form the shape you desire. That could be made out of that 2" "blue board" insulation from Home Depot.
Tony

Anthony Buzak
56 Dexter St.
Tonawanda, NY 14150
716-693-1749

ant.buz@...

www.anthonybuzak.com <http://www.anthonybuzak.com>

* - Fine Furniture*

On Thu, May 12, 2016 at 1:30 PM, J Ed jedwardsat1@... [regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> I've determined that the 2.5v tube will be a no go. I do want to try
> something else, though. I'd like to make a receiver that goes inside a
> wooden cabinet. That's nothing new, as receiver cabinets are commonly and
> easily made from wood. I'd like to make mine a cathedral cabinet shape,
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> To do this, I'll need to know how to bend plywood into the shape of an
> arch. I have seen methods that involve soaking the wood, steaming it, etc.
> I'd also like for my cabinet to have a vintage look, meaning I'd rather not
> use MDF or plastic. Still, I'm learning a new skill and have to be open to
> new ideas.
>
> Ed AE7TE
>
>
>

26382. Re: [regenrx] Bending Plywood

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-12 21:05:09 UTC
From: William Wood
Topic: 26369 Message: 26382

Greetings Everyone
This may not be for everyone, but had this happen a
couple of times over the years. I stored wood from an
old piano and an old dresser in a tin shed for a few years,
and decided to clean this up and the veneer had separated
from most of the wood because of humidity and such. I
separated this and saved the veneer for future projects.
Did find a 'little' mold, but for the most part all was pretty good.
On another occasion brought home an old tube type stereo,
TV and radio and parted it out. Only about a week later went
to take the wood to the landfill and the plywood and veneers
were separating from that wood already. So, if you happen
upon an old dresser or something similar, just lay it on the sod
and it will collect moisture or spray it down a few times and that
glue might separate for you and you'll have free woods and
veneers to play with. I know that don't sound the best, but
it is a good way to recycle :)
73
Bill KE9XQ

On May 12, 2016, at 2:54 PM, Ant Buz ant.buz@... [regenrx] <regenrx@yahoogroups.com> wrote:

>
> Bending ply (wacky wood) is sold in 1/8" and 3/8" thickness. The 3/8" is quite rough and the 1/8" is nice and smooth. Try finding a local cabinet shop to see if they have any cutoffs you have and could use. You will need to make a simple form to glue a couple of pieces together to form the shape you desire. That could be made out of that 2" "blue board" insulation from Home Depot.
> Tony
>
> Anthony Buzak
> 56 Dexter St.
> Tonawanda, NY 14150
> 716-693-1749
>
> ant.buz@...
>
> www.anthonybuzak.com
> - Fine Furniture

26383. Re: Bending Plywood

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-12 21:26:51 UTC
From: Jim Pruitt
Topic: 26369 Message: 26383

Ed, if you have a hobby shop or maybe a Hobby Lobby/Michaelson type craft store they have aircraft plywood (usually distributed by Midwest Industries) in 1/64" up through 3/8" thick sheets up to about a foot wide and 4ft long (usually only up to a foot wide except some model airplane type hobby shops have longer and mail order like Midwest and Lone Star Balsa and many other online hobby distributors) the thin stuff I'd usually used for model airplane wing skins. Thicker is used for fuselages. I don't know what width and thickness you are looking for but the aircraft grade plywood up to about 3/32" bends fairly easily.

Hope this helps. Good luck.
Jim Pruitt
WA7DUY

26384. Re: Can anyone identify what article this 6V6GT 6SK7 5Y3GT station c

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-12 22:15:15 UTC
From: Kenneth Ketner
Topic: 26384 Message: 26384

Arnie, have you made available a circuit for the 3tube set you describe in your note above? I would like to build it, strictly according to your design. I'm not smart enuf to build just from a description hi.

Big fan of your work,

Ken Ketner
KA5ELD
PO Box 65135
Lubbock, TX 79464-5135
Sent from my iPad

26385. Re: Bending Plywood

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-12 23:22:32 UTC
From: willard561@...
Topic: 26369 Message: 26385

Another source for plywood is B&D International in Tacoma, WA.
http://www.bd-international.com/Flat%20plywood.htm
http://www.bd-international.com/Flat%20plywood.htm

26386. Found another use for my new 'isolated' Variac

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-13 01:46:10 UTC
From: Phil
Topic: 26386 Message: 26386

Yeah, not strictly Regen related, but we ALL do use soldering irons of various types.

About a month or so ago I bought that 1000VA 'isolated' Variac (isolated because the primary is isolated from the secondary as in a standard Isolation Transformer.

Well, I didn't expect to get a LOT of use out of it as I only occasionally work on old tube stuff that would benefit the most. It was purchased as a "safety item" for the bench.

Well, yesterday I received a box containing a LOT of terminal strips with parts attached, potentiometers (sp?) and so forth. LOTS of cleaning up to do. I first started the task by using the soldering iron on my soldering station that has the larger tip (the station has two irons). It did the job, but took awhile to heat the terminal lugs and work the parts off. Most of them are those type used military type that have two rows of hollow posts on a phenolic or fiberglass plate with the parts between the two opposite posts. Takes more heat than the typical PC boards.

So then I switched to the smaller (100/140 Watt) Weller gun. IT too worked well but was a bit clumsy.

Then I thought of the 60W Sears Iron. The one I usually reserve for PL-259 plugs. Gets very hot and transfers a LOT of heat. A little too much sometimes ;-)

Then I saw the Variac sitting there. Set it for about 95V, plugged the iron in, and Voila! Instant variable temperature soldering iron. It looks like it will be ideal for the task at hand, and no wear on the soldering station irons or soldering guns (yeah, I probably went overboard on setting up the soldering capabilities of my bench (grin). That Sears iron has been sitting in the toolbox for years with only occasional use. But at least I DO know which end of the soldering iron to hold on to. . .

--
73 From "The Beaconeer's Lair"
Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)

HF/LF RADIOS:
Grundigs: S-350 (~2006), G6 (2011) & S450DLX (2014).
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
Icom: IC-735 Transceiver (~1990).
Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)

Icom: IC-7200 Transceiver (~2015).
R-Shack: DX-380 digital portable (~1990).
SDR: Softrock Ensemble II LF (built from a kit 2015).
Zenith: Royal-7000 Transoceanic Portable (~1968).

ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 4 Port Multicoupler, Feeds Antenna to 4 RX's.
HOMEBREW 8 Hz Audio Filter.
Timewave DSP-599zx Audio Filter.
Behringer 1202fx Audio Mixer (for mixing/routing audio).

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

26387. Re: [regenrx] Found another use for my new 'isolated' Variac

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-13 05:17:36 UTC
From: Leonard Meek
Topic: 26386 Message: 26387

One thing about the Weller guns; the trigger switch contacts will weld if
you keep it on too long, like when you're stripping circuit boards. I ruined
a few of my guns that way.

Leonard

----- Original Message -----
From: "Phil ko6bb1@... [regenrx]" <regenrx@yahoogroups.com>
To: "Regen group" <regenrx@yahoogroups.com>
Sent: Thursday, May 12, 2016 3:46 PM
Subject: [regenrx] Found another use for my new 'isolated' Variac

> Yeah, not strictly Regen related, but we ALL do use soldering irons of
> various types.
>
> About a month or so ago I bought that 1000VA 'isolated' Variac (isolated
> because the primary is isolated from the secondary as in a standard
> Isolation Transformer.
>
> Well, I didn't expect to get a LOT of use out of it as I only
> occasionally work on old tube stuff that would benefit the most. It was
> purchased as a "safety item" for the bench.
>
> Well, yesterday I received a box containing a LOT of terminal strips
> with parts attached, potentiometers (sp?) and so forth. LOTS of
> cleaning up to do. I first started the task by using the soldering iron
> on my soldering station that has the larger tip (the station has two
> irons). It did the job, but took awhile to heat the terminal lugs and
> work the parts off. Most of them are those type used military type that
> have two rows of hollow posts on a phenolic or fiberglass plate with the
> parts between the two opposite posts. Takes more heat than the typical
> PC boards.
>
> So then I switched to the smaller (100/140 Watt) Weller gun. IT too
> worked well but was a bit clumsy.
>
> Then I thought of the 60W Sears Iron. The one I usually reserve for
> PL-259 plugs. Gets very hot and transfers a LOT of heat. A little too
> much sometimes ;-)
>
> Then I saw the Variac sitting there. Set it for about 95V, plugged the
> iron in, and Voila! Instant variable temperature soldering iron. It
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> soldering station irons or soldering guns (yeah, I probably went
> overboard on setting up the soldering capabilities of my bench (grin).
> That Sears iron has been sitting in the toolbox for years with only

> occasional use. But at least I DO know which end of the soldering iron
> to hold on to. . .
>
>
> --
> 73 From "The Beaconeer's Lair"
> Phil, KO6BB
> http://www.qsl.net/ko6bb/ (Web Page)
>
> HF/LF RADIOS:
> Grundigs: S-350 (~2006), G6 (2011) & S450DLX (2014).
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> Icom: IC-735 Transceiver (~1990).
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> ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
> HOMEBREW 4 Port Multicoupler, Feeds Antenna to 4 RX's.
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> Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
> 37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.
>
> Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh
>
>
>
> ------------------------------------
> Posted by: Phil <ko6bb1@...>
> ------------------------------------
>
> "In the interest of Regenerating radio's lost art of Regeneration"
> ------------------------------------
>
> Yahoo Groups Links
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>

26388. Re: [regenrx] Bending Plywood

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-13 05:49:19 UTC
From: kevin asato
Topic: 26369 Message: 26388

lots of steam with the plywood mounted in a jig to help bend and hold shape while the moisture evaporates.
73,
kevin
kc6pob

I've determined that the 2.5v
tube will be a no go. I do want to try something else,
though. I'd like to make a receiver that goes inside a
wooden cabinet. That's nothing new, as receiver cabinets
are commonly and easily made from wood. I'd like to make
mine a cathedral cabinet shape, though.
To do this, I'll need to know how to bend
plywood into the shape of an arch. I have seen methods that
involve soaking the wood, steaming it, etc. I'd also
like for my cabinet to have a vintage look, meaning I'd
rather not use MDF or plastic. Still, I'm learning a new
skill and have to be open to new ideas.
Ed AE7TE

26389. Re: [regenrx] Found another use for my new 'isolated' Variac

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-13 11:43:45 UTC
From: Bill Cromwell
Topic: 26386 Message: 26389

Hi Leonard,

I use a propane torch for that! Get lots of parts in a short time. Melt
the solder in a large area and tap the board to make the parts fall off.

73,

Bill KU8H

On 05/13/2016 01:17 AM, 'Leonard Meek' lemeek@... [regenrx]
wrote:
>
> One thing about the Weller guns; the trigger switch contacts will weld if
> you keep it on too long, like when you're stripping circuit boards. I
> ruined
> a few of my guns that way.
>
> Leonard
>

--
"Intelligence from the internet is unreliable because we cannot verify it's accuracy nor
the author's credentials."

- Julius Caesar

26390. Re: [regenrx] Found another use for my new 'isolated' Variac

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-13 17:08:52 UTC
From: Leonard Meek
Topic: 26386 Message: 26390

I've done that, Bill, but not when I wanted to reuse the board. For that my trusty soldering iron does the job.

Leonard

----- Original Message -----
From: "Bill Cromwell wrcromwell@... [regenrx]"
<regenrx@yahoogroups.com>
To: <regenrx@yahoogroups.com>
Sent: Friday, May 13, 2016 1:43 AM
Subject: Re: [regenrx] Found another use for my new 'isolated' Variac

> Hi Leonard,
>
> I use a propane torch for that! Get lots of parts in a short time. Melt
> the solder in a large area and tap the board to make the parts fall off.
>
> 73,
>
> Bill KU8H
>
> On 05/13/2016 01:17 AM, 'Leonard Meek' lemeek@... [regenrx]
> wrote:
>>
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>> you keep it on too long, like when you're stripping circuit boards. I
>> ruined
>> a few of my guns that way.
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>> Leonard
>>
>
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> "Intelligence from the internet is unreliable because we cannot verify
> it's accuracy nor the author's credentials."
>
> - Julius Caesar
>
>
>
> ------------------------------------
> Posted by: Bill Cromwell <wrcromwell@...>
> ------------------------------------
>
> "In the interest of Regenerating radio's lost art of Regeneration"
> ------------------------------------

>
> Yahoo Groups Links
>
>
>
>

26391. Re: [regenrx] Vacuum tube experimenter board

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-13 22:29:15 UTC
From: kevin asato
Topic: 26366 Message: 26391

I'm more of a "purist" and would rather use a real wooden breadboard/cutting board to mount the components. Newer, plastic boards work as well. Just mount a protoboard strip and tube sockets. The protoboard can be any size, not just the one shown in the pictures. If using higher voltage tubes (versus teh 12 volt versions used), one must keep in mind the interface parameters to modern electronics, especially when dealing with microcontrollers and TTL and CMOS type logic which are current and (positive) voltage limited..

By making your own board, you are not bound to just using low voltage tubes.
73,
kevin
kc6pob

Can anyone recommend a tube based experimenter board like
this one?

This is the first one I ever saw and the web site is in
German so I'm not

understanding much there.

26392. Re: [regenrx] Vacuum tube experimenter board

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-13 22:55:49 UTC
From: kevin asato
Topic: 26366 Message: 26392

sorry, forgot to include this link which shows something similar:

http://diyaudioprojects.blogspot.com/2009/11/diy-vacuum-tube-prototyping-board.html

73,
kevin
kc6pob

I'm more of a "purist" and would
rather use a real wooden breadboard/cutting board to mount
the components. Newer, plastic boards work as well. Just
mount a protoboard strip and tube sockets. The protoboard
can be any size, not just the one shown in the pictures. If
using higher voltage tubes (versus teh 12 volt versions
used), one must keep in mind the interface parameters to
modern electronics, especially when dealing with
microcontrollers and TTL and CMOS type logic which are
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By making your own board, you are not bound to just using
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73,

kevin

kc6pob

Can anyone recommend a tube based experimenter board
like

this one?

This is the first one I ever saw and the web site is in

German so I'm not

understanding much there.

26393. Re: [regenrx] Vacuum tube experimenter board

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-14 04:08:38 UTC
From: Rob
Topic: 26366 Message: 26393

Very nice DIY prototyping board.

THANK YOU

sorry, forgot to include this link which shows something similar:

http://diyaudioprojects.blogspot.com/2009/11/diy-vacuum-tube-prototyping-board.html

73,
kevin
kc6pob

On 05/13/2016 06:29 PM, kevin asato kc6pob@... [regenrx] wrote:
>
> I'm more of a "purist" and would rather use a real wooden
> breadboard/cutting board to mount the components. Newer, plastic
> boards work as well. Just mount a protoboard strip and tube sockets.
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> pictures. If using higher voltage tubes (versus teh 12 volt versions
> used), one must keep in mind the interface parameters to modern
> electronics, especially when dealing with microcontrollers and TTL and
> CMOS type logic which are current and (positive) voltage limited..
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> ---
>
> Can anyone recommend a tube based experimenter board like
> this one?
>
> This is the first one I ever saw and the web site is in
> German so I'm not
>
> understanding much there.
>
>
>

26394. Re: [regenrx] Vacuum tube experimenter board

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-14 04:59:20 UTC
From: kevin asato
Topic: 26366 Message: 26394

I'd like to take credit for it but i just found the link - search terms: "vacuum tube prototype board". Only thing to add would be the appropriate power supplies. It's pretty much what i would build; just not as pretty as a PCB version.
73,
kevin
kc6pob

On Fri, 5/13/16, Rob roomberg@... [regenrx] <regenrx@yahoogroups.com> wrote:

Subject: Re: [regenrx] Vacuum tube experimenter board
To: regenrx@yahoogroups.com
Date: Friday, May 13, 2016, 9:08 PM

Very nice DIY prototyping board.

THANK YOU

sorry, forgot to include this link which shows something
similar:

http://diyaudioprojects.blogspot.com/2009/11/diy-vacuum-tube-prototyping-board.html

73,

kevin

kc6pob

On 05/13/2016 06:29 PM,
kevin asato
kc6pob@...
[regenrx] wrote:

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especially when dealing with microcontrollers
and TTL and
CMOS type logic which are current and
(positive) voltage
limited..

By making your own board, you are not bound to
just using
low voltage tubes.

73,

kevin

kc6pob

26395. Re: [regenrx] Vacuum tube experimenter board

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-14 06:53:51 UTC
From: Rob
Topic: 26366 Message: 26395

My interest level in the German proto board was because they have a user guide that explains in detail how
to experiment with tube circuits.
Upon further poking around the web I found there was a real book ... not just a user guide ....that had experiments to do
on the German proto board.
But that book is only in German so I'm not going down that path.

I makes more sense to build this proto board you found.
I can do that.

As far as voltages goes.....

My very first HF radio here was a $10 kit.... KNIGHTSMITE.... 3.686 Mhz CW transceiver.
It fit in a mint can with its power supply... a 9 volt battery.
I built one and my 12 year old son built one.
Mine worked fine but
when my son pressed the straight key to transmit Morse code we had a very interesting event.
His circuit board smoked.
His inductors smoked.
The vinyl table cloth melted in a 6 inch ring around his KNIGHTSMITE and then ignited
while the wooden table blackened.... real fast ... as fast as you could key dit dah dah.
Just at that moment my wife walked into the kitchen watching us burn the kitchen table.
Of course the reaction my son and I had was nothing less than us bursting into laughter.
Of all the possible things that could go wrong, fire was not even a considered option when
building a 9 volt powered circuit board the size of a postage stamp that expected to yield
about 300 milliwatts of output.

So if 9 volts will burn the table... gee... I wonder what 350 volts will do?

On 05/14/2016 12:59 AM, kevin asato kc6pob@... [regenrx] wrote:
>
> I'd like to take credit for it but i just found the link - search
> terms: "vacuum tube prototype board". Only thing to add would be the
> appropriate power supplies. It's pretty much what i would build; just
> not as pretty as a PCB version.
> 73,
> kevin

> kc6pob
> ----------
> On Fri, 5/13/16, Rob roomberg@... [regenrx]
> <regenrx@yahoogroups.com> wrote:
>
> Subject: Re: [regenrx] Vacuum tube experimenter board
> To: regenrx@yahoogroups.com
> Date: Friday, May 13, 2016, 9:08 PM
>
>
>
> Very nice DIY prototyping board.
>
>
>
> THANK YOU
>
>
>
>
>
> sorry, forgot to include this link which shows something
> similar:
>
>
>
> http://diyaudioprojects.blogspot.com/2009/11/diy-vacuum-tube-prototyping-board.html
>
>
>
> 73,
>
> kevin
>
> kc6pob
>
> ----------
>
>
>
>
>
> On 05/13/2016 06:29 PM,
> kevin asato
> kc6pob@...
> [regenrx] wrote:
>
>
>
>

>
> I'm more of a "purist" and
> would rather use a real wooden
> breadboard/cutting board to mount the
> components. Newer,
> plastic boards work as well. Just mount a
> protoboard strip
> and tube sockets. The protoboard can be any
> size, not just
> the one shown in the pictures. If using higher
> voltage
> tubes (versus teh 12 volt versions used), one
> must keep in
> mind the interface parameters to modern
> electronics,
> especially when dealing with microcontrollers
> and TTL and
> CMOS type logic which are current and
> (positive) voltage
> limited..
>
>
>
> By making your own board, you are not bound to
> just using
> low voltage tubes.
>
> 73,
>
> kevin
>
> kc6pob
>
>
> ----------
>
>

26396. bread board plastic cutting board

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-14 07:17:16 UTC
From: Rob
Topic: 26366 Message: 26396

Is there any way to actually identify what kind of plastic a cutting
board in made out of?
I bought 3 different cutting boards.
Each is a different thickness.... 1/8... 1/4... 1/2 inch.
Each has different cutting properties.
The 1/8 and 1/4 melt and bubble a jagged edge when cut with a circular
saw or drill.

The 1/2 inch cutting board cuts clean like MDF Medium-density
fibreboard
and drills clean
AND
can be tapped with threads.
All sorts of radio parts can be made with this stuff.
I just haven't figured out what temperature it would fail at yet.

On 05/13/2016 06:29 PM, kevin asato kc6pob@... [regenrx] wrote:
>
> I'm more of a "purist" and would rather use a real wooden
> breadboard/cutting board to mount the components. Newer, plastic
> boards work as well. Just mount a protoboard strip and tube sockets.
> The protoboard can be any size, not just the one shown in the
> pictures. If using higher voltage tubes (versus teh 12 volt versions
> used), one must keep in mind the interface parameters to modern
> electronics, especially when dealing with microcontrollers and TTL and
> CMOS type logic which are current and (positive) voltage limited..
>
> By making your own board, you are not bound to just using low voltage
> tubes.
> 73,
> kevin
> kc6pob
> --
>
> Can anyone recommend a tube based experimenter board like
> this one?
>
> This is the first one I ever saw and the web site is in
> German so I'm not
>
> understanding much there.
>
>
>

26397. Re: [regenrx] Vacuum tube experimenter board

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-14 12:22:46 UTC
From: david.newkirk@...
Topic: 26366 Message: 26397

Rob wrote:

> So if 9 volts will burn the table... gee... I wonder what 350 volts will do?

Could be interesting, if, as will your tablecloth-melting experience, you don't carefully check wiring and check for solder bridges.

But there's another aspect. The power supply was 9 volts -- got it. But what kind of battery? I'd be amazed if the short-circuit current in a 9-volt transistor-radio battery could source the sort of current that would make inductors, resistors, and your tablecloth smoke. Bet you were using something with considerably higher current capability than a 9-volt "transistor radio" battery, which inside is really just 6 wimpy little 1.5-V LeClanche cells in series.

Few tube users will be sourcing the likes of 350 V from a battery; most will use transformer-rectifier-filter power supplies. Although it's possible to build a herking high-voltage supply such that short circuiting it through the gear powered melts things and keeps melting them, that wouldn't go on for long. Resistors smoke, of course; transformers have a special way of complaining... Maybe one's power-supply diodes don't go (if they're solid-state) before something else opens up; vacuum-tube rectifier plates, on the other hand, immediately overheat to bright orange. High-voltage shorts from line-operated supplies tend to cause bangs and not just smoke because the energy stored in filter capacitors is suddenly discharged.

So it pays to keep the current capability of the power source in mind when experimenting, either using current limiting, perhaps a fuse, at first-power-up time.

By the way, in the area of battery source current, a _QST_ author I worked with was in aerospace and did an article for us about managing nickel-cadmium cells/batteries for long life. Compared to carbon-zinc cells and even lead-acid car/boat/golf-cart cells, an equivalent NiCd cell can source astoundingly high current, such that they're used to help start jet engines, which starting sequence goes on for much longer, and requires much more current, than any equivalent automotive process. (I see that for this same reason, NiCds are also the thing for starting one's helicopter.) So batteries for that service are quite robust, and last a long time. The short story is that he was able to score himself an NiCd starting battery--a preventive-maintenance pull--for his car. You know how we end up replacing our lead-acid car batteries multiple times over the lifetime of a vehicle? He was able to use the same "used" NiCd starting battery _across the lifetimes of three cars_ .

Best regards,

Dave
amateur radio W9BRD

26398. Re: [regenrx] bread board plastic cutting board

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-14 13:14:50 UTC
From: kevin asato
Topic: 26366 Message: 26398

Not sure of the plastic material which can be different from store to store. I get mine from the Japanese markets or the Japanese version of the dollar store - Daiso. I have noticed that the thinner boards do have a tendency to warp so i would go with the 1/2". I would also consider mounting the sockets on standoffs to allow access to the pins below as well as a bit of air. The glow in the tubes (heaters) could affect the plastic below (refer back to first sentence).
My preference is a wooden cutting board (finished or unfinished) for that classic look! I just found an old turkey carving board in my garage which I am considering refinishing and salvaging for a project.
73,
kevin
kc6pob

Is there any way to actually identify what kind of
plastic a cutting
board in made out of?

I bought 3 different cutting boards.

Each is a different thickness.... 1/8... 1/4... 1/2
inch.

Each has different cutting properties.

The 1/8 and 1/4 melt and bubble a jagged edge when cut
with a
circular saw or drill.

The 1/2 inch cutting board cuts clean like MDF
Medium-density
fibreboard

and drills clean

AND

can be tapped with threads.

All sorts of radio parts can be made with this stuff.

I just haven't figured out what temperature it would
fail at yet.

26399. Re: [regenrx] Vacuum tube experimenter board

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-14 14:28:19 UTC
From: Jedwardsat1
Topic: 26366 Message: 26399

One of my first electronics projects was a magnetic pulse generator designed to make a changing magnetic field for arthritis. I don't believe it would actually do that but I wanted the experience.

I wired the 555 timer circuit wrong and it latched the TIP31 output transistor on. That caused the metal tab to heat up enough to melt solder. The supply was a 9v battery. I still keep that transistor, somewhere.

Ed AE7TE

Sent from my Samsung Smart Phone

-------- Original message --------
Subject: Re: [regenrx] Vacuum tube experimenter board
From: "david.newkirk@gmail.com [regenrx]" <regenrx@yahoogroups.com>
To: regenrx@yahoogroups.com
CC:

Rob wrote:

> So if 9 volts will burn the table... gee... I wonder what 350 volts will do?

Could be interesting, if, as will your tablecloth-melting experience, you don't carefully check wiring and check for solder bridges.

But there's another aspect. The power supply was 9 volts -- got it. But what kind of battery? I'd be amazed if the short-circuit current in a 9-volt transistor-radio battery could source the sort of current that would make inductors, resistors, and your tablecloth smoke. Bet you were using something with considerably higher current capability than a 9-volt "transistor radio" battery, which inside is really just 6 wimpy little 1.5-V LeClanche cells in series.

Few tube users will be sourcing the likes of 350 V from a battery; most will use transformer-rectifier-filter power supplies. Although it's possible to build a herking high-voltage supply such that short circuiting it through the gear powered melts things and keeps melting them, that wouldn't go on for long. Resistors smoke, of course; transformers have a special way of complaining... Maybe one's power-supply diodes don't go (if they're solid-state) before something else opens up; vacuum-tube rectifier plates, on the other hand, immediately overheat to bright orange. High-voltage shorts from line-operated supplies tend to cause bangs and not just smoke because the energy stored in filter capacitors is suddenly discharged.

So it pays to keep the current capability of the power source in mind when experimenting, either using current limiting, perhaps a fuse, at first-power-up time.

By the way, in the area of battery source current, a _QST_ author I worked with was in aerospace and did an article for us about managing nickel-cadmium cells/batteries for long life. Compared to carbon-zinc cells and even lead-acid car/boat/golf-cart cells, an

equivalent NiCd cell can source astoundingly high current, such that they're used to help start jet engines, which starting sequence goes on for much longer, and requires much more current, than any equivalent automotive process. (I see that for this same reason, NiCds are also the thing for starting one's helicopter.) So batteries for that service are quite robust, and last a long time. The short story is that he was able to score himself an NiCd starting battery--a preventive-maintenance pull--for his car. You know how we end up replacing our lead-acid car batteries multiple times over the lifetime of a vehicle? He was able to use the same "used" NiCd starting battery _across the lifetimes of three cars_ .

Best regards,

Dave
amateur radio W9BRD

26400. Re: [regenrx] Vacuum tube experimenter board

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-14 14:51:18 UTC
From: Bill Cromwell
Topic: 26366 Message: 26400

Hi,

I have read accounts of a single, 9-volt 'transistor' battery causing burns that needed treatment when carried in a pocketful of change. Treat them with respect. After I read about that I stopped doing the 'tip of the tongue' test. When they test good we are experiencing the beginnings of burn.

73,

Bill KU8H

On 05/14/2016 08:22 AM, david.newkirk@... [regenrx] wrote:
>
> Rob wrote:
>
>
> > So if 9 volts will burn the table... gee... I wonder what 350 volts
> will do?
>
> Could be interesting, if, as will your tablecloth-melting experience,
> you don't carefully check wiring and check for solder bridges.
>
> But there's another aspect. The power supply was 9 volts -- got it.
> But what kind of battery? I'd be amazed if the short-circuit current
> in a 9-volt transistor-radio battery could source the sort of current
> that would make inductors, resistors, and your tablecloth smoke. Bet
> you were using something with considerably higher current capability
> than a 9-volt "transistor radio" battery, which inside is really just
> 6 wimpy little 1.5-V LeClanche cells in series.
>
> Few tube users will be sourcing the likes of 350 V from a battery;
> most will use transformer-rectifier-filter power supplies. Although
> it's possible to build a herking high-voltage supply such that short
> circuiting it through the gear powered melts things and keeps melting
> them, that wouldn't go on for long. Resistors smoke, of course;
> transformers have a special way of complaining... Maybe one's
> power-supply diodes don't go (if they're solid-state) before something
> else opens up; vacuum-tube rectifier plates, on the other hand,
> immediately overheat to bright orange. High-voltage shorts from
> line-operated supplies tend to cause bangs and not just smoke because
> the energy stored in filter capacitors is suddenly discharged.
>
> So it pays to keep the current capability of the power source in mind
> when experimenting, either using current limiting, perhaps a fuse, at
> first-power-up time.

>
> By the way, in the area of battery source current, a _QST_ author I
> worked with was in aerospace and did an article for us about managing
> nickel-cadmium cells/batteries for long life. Compared to carbon-zinc
> cells and even lead-acid car/boat/golf-cart cells, an equivalent NiCd
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> help start jet engines, which starting sequence goes on for much
> longer, and requires much more current, than any equivalent automotive
> process. (I see that for this same reason, NiCds are also the thing
> for starting one's helicopter.) So batteries for that service are
> quite robust, and last a long time. The short story is that he was
> able to score himself an NiCd starting battery--a
> preventive-maintenance pull--for his car. You know how we end up
> replacing our lead-acid car batteries multiple times over the lifetime
> of a vehicle? He was able to use the same "used" NiCd starting battery
> _across the lifetimes of three cars_ .
>
> Best regards,
>
> Dave
> amateur radio W9BRD
>

--
"Intelligence from the internet is unreliable because we cannot verify it's accuracy nor the author's credentials."

- Julius Caesar

26401. Vacuum tube experimenter board pocket fire plastic

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-14 17:21:45 UTC
From: Rob
Topic: 26366 Message: 26401

RE: Bet you were using something with considerably higher current
capability than a 9-volt "transistor radio" battery, which inside is
really just 6 wimpy little 1.5-V LeClanche cells in series.

NOPE... nothing more than a DURACELL coppertop plugged into the KNIGHTSMITE
made of these parts:
http://www.qsl.net/kl7aqc/frklsmpcbH.html
http://www.qsl.net/kl7aqc/frklsmppch.html
http://www.al7fs.us/SmiteAltoids.jpg

http://www.qsl.net/bd6cr/pixie/Pixie_improvement.pdf

And about pocket fire.....
I had a SANSA CLIP mp3 player the size of a large postage stamp that
became a pocket toaster roasting
chestnuts.
That was a USB rechargeable battery. Don't know the chemistry.

I have wooden base tube holders that I can mount on plastic board
without melting.

http://www.learnmorsecode.com/regen/resistance.jpg
http://www.learnmorsecode.com/help/type30/index.html

On 05/14/2016 10:51 AM, Bill Cromwell wrcromwell@... [regenrx] wrote:
>
> Hi,
>
> I have read accounts of a single, 9-volt 'transistor' battery causing
> burns that needed treatment when carried in a pocketful of change. Treat
> them with respect. After I read about that I stopped doing the 'tip of
> the tongue' test. When they test good we are experiencing the beginnings
> of burn.
>
> 73,
>
> Bill KU8H
>
> On 05/14/2016 08:22 AM, david.newkirk@... [regenrx] wrote:
> >
> > Rob wrote:
> >
> >
> > > So if 9 volts will burn the table... gee... I wonder what 350 volts
> > will do?
> >

> > Could be interesting, if, as will your tablecloth-melting experience,
> > you don't carefully check wiring and check for solder bridges.
> >
> > But there's another aspect. The power supply was 9 volts -- got it.
> > But what kind of battery? I'd be amazed if the short-circuit current
> > in a 9-volt transistor-radio battery could source the sort of current
> > that would make inductors, resistors, and your tablecloth smoke. Bet
> > you were using something with considerably higher current capability
> > than a 9-volt "transistor radio" battery, which inside is really just
> > 6 wimpy little 1.5-V LeClanche cells in series.
> >
> > Few tube users will be sourcing the likes of 350 V from a battery;
> > most will use transformer-rectifier-filter power supplies. Although
> > it's possible to build a herking high-voltage supply such that short
> > circuiting it through the gear powered melts things and keeps melting
> > them, that wouldn't go on for long. Resistors smoke, of course;
> > transformers have a special way of complaining... Maybe one's
> > power-supply diodes don't go (if they're solid-state) before something
> > else opens up; vacuum-tube rectifier plates, on the other hand,
> > immediately overheat to bright orange. High-voltage shorts from
> > line-operated supplies tend to cause bangs and not just smoke because
> > the energy stored in filter capacitors is suddenly discharged.
> >
> > So it pays to keep the current capability of the power source in mind
> > when experimenting, either using current limiting, perhaps a fuse, at
> > first-power-up time.
> >
> > By the way, in the area of battery source current, a _QST_ author I
> > worked with was in aerospace and did an article for us about managing
> > nickel-cadmium cells/batteries for long life. Compared to carbon-zinc
> > cells and even lead-acid car/boat/golf-cart cells, an equivalent NiCd
> > cell can source astoundingly high current, such that they're used to
> > help start jet engines, which starting sequence goes on for much
> > longer, and requires much more current, than any equivalent automotive
> > process. (I see that for this same reason, NiCds are also the thing
> > for starting one's helicopter.) So batteries for that service are
> > quite robust, and last a long time. The short story is that he was
> > able to score himself an NiCd starting battery--a
> > preventive-maintenance pull--for his car. You know how we end up
> > replacing our lead-acid car batteries multiple times over the lifetime
> > of a vehicle? He was able to use the same "used" NiCd starting battery
> > _across the lifetimes of three cars_ .
> >
> > Best regards,
> >
> > Dave
> > amateur radio W9BRD
> >
>
> --

> "Intelligence from the internet is unreliable because we cannot verify
> it's accuracy nor the author's credentials."
>
> - Julius Caesar
>
>

26402. Re: [regenrx] Vacuum tube experimenter board pocket fire plastic

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-14 17:59:51 UTC
From: Phil
Topic: 26366 Message: 26402

Almost certainly a Lithium battery, of which even small ones can source
heavy currents, and in some cases even cause a fire or explosion (though
usually safe in a device like a MP3 player etc).

73 From "The Beaconeer's Lair"
Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)

HF/LF RADIOS:
Grundigs: S-350 (~2006), G6 (2011) & S450DLX (2014).
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
Icom: IC-735 Transceiver (~1990).
Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
Icom: IC-7200 Transceiver (~2015).
R-Shack: DX-380 digital portable (~1990).
SDR: Softrock Ensemble II LF (built from a kit 2015).
Zenith: Royal-7000 Transoceanic Portable (~1968).

ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 4 Port Multicoupler, Feeds Antenna to 4 RX's.
HOMEBREW 8 Hz Audio Filter.
Timewave DSP-599zx Audio Filter.
Behringer 1202fx Audio Mixer (for mixing/routing audio).

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

On 5/14/2016 5:21 PM, Rob roomberg@... [regenrx] wrote:
>
>
>
> And about pocket fire.....
> I had a SANSA CLIP mp3 player the size of a large postage stamp that
> became a pocket toaster roasting
> chestnuts.
> That was a USB rechargeable battery. Don't know the chemistry.
>

26403. Re: [regenrx] Vacuum tube experimenter board

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-14 20:52:58 UTC
From: Leonard Meek
Topic: 26366 Message: 26403

I have a little cordless soldering pencil that just uses a couple of
penlight cells, and it surely melts solder.

Leonard

----- Original Message -----
From: "Bill Cromwell wrcromwell@... [regenrx]"
<regenrx@yahoogroups.com>
To: <regenrx@yahoogroups.com>
Sent: Saturday, May 14, 2016 4:51 AM
Subject: Re: [regenrx] Vacuum tube experimenter board

> Hi,
>
> I have read accounts of a single, 9-volt 'transistor' battery causing
> burns that needed treatment when carried in a pocketful of change. Treat
> them with respect. After I read about that I stopped doing the 'tip of
> the tongue' test. When they test good we are experiencing the beginnings
> of burn.
>
> 73,
>
> Bill KU8H
>
> On 05/14/2016 08:22 AM, david.newkirk@... [regenrx] wrote:
>>
>> Rob wrote:
>>
>>
>> > So if 9 volts will burn the table... gee... I wonder what 350 volts
>> will do?
>>
>> Could be interesting, if, as will your tablecloth-melting experience,
>> you don't carefully check wiring and check for solder bridges.
>>
>> But there's another aspect. The power supply was 9 volts -- got it.
>> But what kind of battery? I'd be amazed if the short-circuit current
>> in a 9-volt transistor-radio battery could source the sort of current
>> that would make inductors, resistors, and your tablecloth smoke. Bet
>> you were using something with considerably higher current capability
>> than a 9-volt "transistor radio" battery, which inside is really just
>> 6 wimpy little 1.5-V LeClanche cells in series.
>>
>> Few tube users will be sourcing the likes of 350 V from a battery;
>> most will use transformer-rectifier-filter power supplies. Although
>> it's possible to build a herking high-voltage supply such that short

>> circuiting it through the gear powered melts things and keeps melting
>> them, that wouldn't go on for long. Resistors smoke, of course;
>> transformers have a special way of complaining... Maybe one's
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>> else opens up; vacuum-tube rectifier plates, on the other hand,
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>> So it pays to keep the current capability of the power source in mind
>> when experimenting, either using current limiting, perhaps a fuse, at
>> first-power-up time.
>>
>> By the way, in the area of battery source current, a _QST_ author I
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>> cells and even lead-acid car/boat/golf-cart cells, an equivalent NiCd
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>> able to score himself an NiCd starting battery--a
>> preventive-maintenance pull--for his car. You know how we end up
>> replacing our lead-acid car batteries multiple times over the lifetime
>> of a vehicle? He was able to use the same "used" NiCd starting battery
>> _across the lifetimes of three cars_ .
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>> Best regards,
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>> Dave
>> amateur radio W9BRD
>>
>
> --
> "Intelligence from the internet is unreliable because we cannot verify
> it's accuracy nor the author's credentials."
>
> - Julius Caesar
>
>
>
> ------------------------------------
> Posted by: Bill Cromwell <wrcromwell@...>
> ------------------------------------
>
> "In the interest of Regenerating radio's lost art of Regeneration"
> ------------------------------------
>

> Yahoo Groups Links
>
>
>
>

26404. Re: [regenrx] Vacuum tube experimenter board pocket fire plastic

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-14 22:18:54 UTC
From: James Fuller
Topic: 26366 Message: 26404

Hi,
I don't know about 9V batteries but a 1.2V Nicad can ruin your day. I used to light my model airplane engine glow plugs with one. I bent a small U shape on the end of a wire then taped the wire to the side of a cell. I would hook the wire (-) over the plug and let the plus bump touch the cylinder. Worked great for starting. One day I started the engine and dropped the cell into my pocket. It shorted out on a coin in my pocket and gave me a bad burn on my upper thigh. This in spite of shucking myself out of my pants in about two milliseconds. I bet my club members still laugh about it.

James Fuller

Sent from my iPad

> On May 14, 2016, at 11:21 AM, Rob roomberg@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
>
>
> RE: Bet you were using something with considerably higher current capability than a 9-volt "transistor radio" battery, which inside is really just 6 wimpy little 1.5-V LeClanche cells in series.
>
> NOPE... nothing more than a DURACELL coppertop plugged into the KNIGHTSMITE
> made of these parts:
> http://www.qsl.net/kl7aqc/frklsmpcbH.html
> http://www.qsl.net/kl7aqc/frklsmppch.html
> http://www.al7fs.us/SmiteAltoids.jpg
>
> http://www.qsl.net/bd6cr/pixie/Pixie_improvement.pdf
>
>
> And about pocket fire.....
> I had a SANSA CLIP mp3 player the size of a large postage stamp that became a pocket toaster roasting
> chestnuts.
> That was a USB rechargeable battery. Don't know the chemistry.
>
> I have wooden base tube holders that I can mount on plastic board without melting.
>
> http://www.learnmorsecode.com/regen/resistance.jpg
> http://www.learnmorsecode.com/help/type30/index.html
>
>
>
>
>> On 05/14/2016 10:51 AM, Bill Cromwell wrcromwell@... [regenrx] wrote:
>> Hi,

>>
>> I have read accounts of a single, 9-volt 'transistor' battery causing
>> burns that needed treatment when carried in a pocketful of change. Treat
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>> On 05/14/2016 08:22 AM, david.newkirk@... [regenrx] wrote:
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>> > > So if 9 volts will burn the table... gee... I wonder what 350 volts
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>> > Could be interesting, if, as will your tablecloth-melting experience,
>> > you don't carefully check wiring and check for solder bridges.
>> >
>> > But there's another aspect. The power supply was 9 volts -- got it.
>> > But what kind of battery? I'd be amazed if the short-circuit current
>> > in a 9-volt transistor-radio battery could source the sort of current
>> > that would make inductors, resistors, and your tablecloth smoke. Bet
>> > you were using something with considerably higher current capability
>> > than a 9-volt "transistor radio" battery, which inside is really just
>> > 6 wimpy little 1.5-V LeClanche cells in series.
>> >
>> > Few tube users will be sourcing the likes of 350 V from a battery;
>> > most will use transformer-rectifier-filter power supplies. Although
>> > it's possible to build a herking high-voltage supply such that short
>> > circuiting it through the gear powered melts things and keeps melting
>> > them, that wouldn't go on for long. Resistors smoke, of course;
>> > transformers have a special way of complaining... Maybe one's
>> > power-supply diodes don't go (if they're solid-state) before something
>> > else opens up; vacuum-tube rectifier plates, on the other hand,
>> > immediately overheat to bright orange. High-voltage shorts from
>> > line-operated supplies tend to cause bangs and not just smoke because
>> > the energy stored in filter capacitors is suddenly discharged.
>> >
>> > So it pays to keep the current capability of the power source in mind
>> > when experimenting, either using current limiting, perhaps a fuse, at
>> > first-power-up time.
>> >
>> > By the way, in the area of battery source current, a _QST_ author I
>> > worked with was in aerospace and did an article for us about managing
>> > nickel-cadmium cells/batteries for long life. Compared to carbon-zinc
>> > cells and even lead-acid car/boat/golf-cart cells, an equivalent NiCd

>> > cell can source astoundingly high current, such that they're used to
>> > help start jet engines, which starting sequence goes on for much
>> > longer, and requires much more current, than any equivalent automotive
>> > process. (I see that for this same reason, NiCds are also the thing
>> > for starting one's helicopter.) So batteries for that service are
>> > quite robust, and last a long time. The short story is that he was
>> > able to score himself an NiCd starting battery--a
>> > preventive-maintenance pull--for his car. You know how we end up
>> > replacing our lead-acid car batteries multiple times over the lifetime
>> > of a vehicle? He was able to use the same "used" NiCd starting battery
>> > _across the lifetimes of three cars_ .
>> >
>> > Best regards,
>> >
>> > Dave
>> > amateur radio W9BRD
>> >
>>
>> --
>> "Intelligence from the internet is unreliable because we cannot verify it's accuracy nor the author's credentials."
>>
>> - Julius Caesar
>>
>
>
>
>

26405. RE: [regenrx] Vacuum tube experimenter board

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-15 03:18:47 UTC
From: Hubert Miller
Topic: 26366 Message: 26405

You are absolutely right about this. I did a ‘dead short’ test on this size battery a few years back, and while i don’t remember the exact number of amperes

they will drive, they definitely can drive amps to heat up or melt metal. This is a “single use” stunt; the battery doesn’t recover from this.

And yes, i have seen techs “test” batteries for “freshness” by the method you refer to, but it always looked kind of disgusting to me.

-Hue

>I have read accounts of a single, 9-volt 'transistor' battery causing

burns that needed treatment when carried in a pocketful of change. Treat

them with respect. After I read about that I stopped doing the 'tip of

the tongue' test. When they test good we are experiencing the beginnings

of burn.

73, Bill KU8H

26406. lick battery to test it

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-15 03:47:09 UTC
From: Rob
Topic: 26366 Message: 26406

I play musical instruments that require 9 volt batteries.
DURACELL COPPERTOP 9 volt batteries cost $5.
My gear requires 4 batteries.
If something does not work then the battery is ALWAYS the suspect fail in the chain of technology.
If I pull apart a device and put down a battery , or two, I always rely on tasting the battery to know which one works.

I have extremely low amperage amplifiers that take a month or two to kill a battery
and
I have a reverb pedal that sucks down 100 milliamps and will completely stop working because it draws a
carbon 9 volt battery down below 8 volts in LESS THAN THE TIME IT TAKES TO PLAY THREE SONGS.
AND
will stop working in less than an hour on a DURACELL COPPERTOP battery
so I have resorted to PAIRING two 9 volt batteries together in parallel to share the burden
and those TWO batteries will last a month under that load stress.
So just for giggles.....
I sewed together FIVE 9 volt battery clips to one plug and used the El Cheapo
ONE DOLLAR batteries and got weeks instead of minutes out of them.

And probably licked every one of them a few times.
Click on the purple cello:
http://www.jimthorpelivemusic.com

On 05/14/2016 11:18 PM, Hubert Miller kargo_cult@... [regenrx] wrote:
>
> You are absolutely right about this. I did a ‘dead short’ test on this
> size battery a few years back, and while i don’t remember the exact
> number of amperes
>
> they will drive, they definitely can drive amps to heat up or melt
> metal. This is a “single use” stunt; the battery doesn’t recover from
> this.
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> And yes, i have seen techs “test” batteries for “freshness” by the
> method you refer to, but it always looked kind of disgusting to me.
>
> -Hue
>
> >I have read accounts of a single, 9-volt 'transistor' battery causing
>

> burns that needed treatment when carried in a pocketful of change. Treat
>
> them with respect. After I read about that I stopped doing the 'tip of
>
> the tongue' test. When they test good we are experiencing the beginnings
>
> of burn.
>
> 73, Bill KU8H
>
>

26407. RE: [regenrx] lick battery to test it

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-15 04:06:51 UTC
From: Hubert Miller
Topic: 26366 Message: 26407

The 9 volt batteries were never designed to source 100 mA. They were intended for a max draw of around 10-15 mA max and maybe occasionally peaking 20 mA.
Even 20 mA is a damaging load to them. The problem with the "taste test" i think, is that it does not test the battery under a realistic load. Battery test devices
DO include a resistance load.
Many instruments now do include built-in preamps or tuning devices. The only caution i find about what brand battery to use, is -- the battery to use is the one
you will check up on regularly. Leaking batteries are potentially deadly to electronics and positively destructive to resale value.

There is a brand of battery - Duracell "Copper Top", which in the 1.5 volt size, in AA and maybe others - that has a built-on the cell case - battery tester, which
has a row of colors red, yellow, green, to show the cell state. I carefully pealed the test strip off the cell using a sharp box knife. This is crude surgery and the
survival rate of the patients is not high. I was thinking i could use the strip for a transmitter RF output indicator or for a front panel battery indicator. I found
the resistance of the thing around 5 ohms, so it's throwing about a 300 mA load on the battery for a test, which seems like a good rigorous test for an AA.
I did get a couple of the strips off and still working, but the resistance is too low for an RF transmitter load, by itself, and besides, the strips are VERY fragile
when they're off the battery, so i pretty much gave up that experiment. It was fun, though, doing.
-Hue Miller

26408. Re: [regenrx] lick battery to test it

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-15 04:27:11 UTC
From: Leonard Meek
Topic: 26366 Message: 26408

One of the weaknesses of batteries is the battery contacts.

Leonard

----- Original Message -----
From: Rob roomberg@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Saturday, May 14, 2016 5:47 PM
Subject: [regenrx] lick battery to test it

I play musical instruments that require 9 volt batteries.
DURACELL COPPERTOP 9 volt batteries cost $5.
My gear requires 4 batteries.
If something does not work then the battery is ALWAYS the suspect fail in the chain of technology.
If I pull apart a device and put down a battery , or two, I always rely on tasting the battery to know which one works.

I have extremely low amperage amplifiers that take a month or two to kill a battery
and
I have a reverb pedal that sucks down 100 milliamps and will completely stop working because it draws a
carbon 9 volt battery down below 8 volts in LESS THAN THE TIME IT TAKES TO PLAY THREE SONGS.
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will stop working in less than an hour on a DURACELL COPPERTOP battery
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And probably licked every one of them a few times.
Click on the purple cello:
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On 05/14/2016 11:18 PM, Hubert Miller kargo_cult@... [regenrx] wrote:

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And yes, i have seen techs “test” batteries for “freshness” by the method you refer to, but it always looked kind of disgusting to me.

-Hue

>I have read accounts of a single, 9-volt 'transistor' battery causing burns that needed treatment when carried in a pocketful of change. Treat them with respect. After I read about that I stopped doing the 'tip of the tongue' test. When they test good we are experiencing the beginnings of burn.

73, Bill KU8H

26409. RE: [regenrx] lick battery to test it

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-15 04:36:06 UTC
From: Hubert Miller
Topic: 26366 Message: 26409

Which reminds me. The 45 volt batteries we used in the landline telephone industry would drive up to a couple amps. The reason i know this is, there was a device called a "burn box" which used a stack of them to deliver around 500 volts for diagnostic testing. The self-test function of the box called the batteries good if they would deliver at least 1.5 amps direct short - internal resistance being the limiting factor. Of course 1.5 amp is a lot more than we require for radio use, so i always tried to scrounge the old batteries when they were changed out, twelve or 16 of them in a box. The old discards were fine for battery-tube circuits and i gave boxes of them to a friend to power his GRC-9 receiver and the Chinese 103E clone of the GRC-9. Wish i still had a steady supply of them but that's over. The current "burn box" uses a rechargeable Nicad battery and a step-up circuit; the old 45 volt batts were just too expensive to replace - as you all know. I still have a few boxes of those batteries with date codes back to maybe 10, 15 years ago and those used batteries will still power tube circuits. These late-model 45 volt batteries actually used 30 AAA cells soldered in series. The "burn box" was used to find a resistance leakage spot in cable pairs; the high voltage would break down the leakage and fuse the wires, so that a fault distance locating instrument could more easily find the defect location. (I heard one story of some techs on a trouble call, discovered that the complainant's lowlife neighbor had tapped into his phone drop (wired service) to get free phone service. The tech isolated the wires to the suspect's house, and applied the burn box to the line. That ended the usability of the suspect's phone. I don't know the veracity of this story.)

Some few, a small minority of 9 volt batteries use 6 AAAA cells in series inside, friction fit, not soldered, instead of the sandwich-cell construction. I have ripped open those 9 volt batts to harvest AAAA cells for special project use where i specifically wanted that very slender cell size. (Specifically, to make a 'bias battery' with three of these, for the GRC-9 receiver, which uses a 3Q4 output tube.) ** I have not actually seen any equipment that uses AAAA cells but you can buy them, just not at any store near you.
-Hue Miller

**The unexpected finding on the GRC-9 receiver is that using a "bias battery" for grid1 is that resting plate current is insignificantly different whether you use a -4.5 bias or zero bias. I'm sure this is not the case for output triodes or tetrodes or larger pentodes. The only observed difference is that 3Q4 with zero bias, strong audio played at loudspeaker level, shows distortion.

26410. Re: Vacuum tube experimenter board pocket fire plastic

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-15 04:51:53 UTC
From: david.newkirk@...
Topic: 26366 Message: 26410

Rob wrote:

> NOPE... nothing more than a DURACELL coppertop plugged into the KNIGHTSMITE

I stand corrected about their short-circuit capacity. I commonly don't use 9-V cells (unless equipment calls for them) because they're so expensive for the capacity you get. Line-operated power supplies with short-circuit shutdown give a false sense of security. My big ICOM 30-A supply, with a power switch and terminal posts added so it can be used as a bench supply, is so finicky about low-Z loads that it won't start up properly just two or three 12.6-V tube heaters preconnected at power-up. (As is true of all metals used at incandescence, their resistance is much lower cold than hot, so to use that supply to light tubes I disconnect the tube-heater load with the supply turned off, power up, and then reconnect the load.)

And BTW, not to re-open the discussion of transformerless power supplies, but another positive of having transformer between the equipment and ac line, even a 1:1 (isolation) job, is that it serves as a current limiter in the event of a short circuit on the secondary side. Plenty of bad stuff can still happen with a hard, long-term short on the secondary side--including the death of the transformer--but at least the full capacity of that branch of the line (otherwise limited only by a fuse or breaker at the electric panel, maybe backed up by the breaker on the outlet strip one may be using) isn't available for mischief.

My first and last experiment with a transformerless supply--had plenty of event-free All American Five experience with them, but those were factory-built jobs--was at age 15 or 16 with a half-wave-rectified supply for a portable Boosted Pierce tube transmitter. I thought I'd installed sufficient current-limiting resistance in series with the (black painted glass) rectifier diode, but after the loud hum and pop on power up the diode's two pigtails were just pointing at each across space with no diode in between.

Best regards,

Dave
amateur radio W9BRD

26411. Re: [regenrx] bread board plastic cutting board

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-15 05:57:33 UTC
From: J Ed
Topic: 26366 Message: 26411

Sounds like the thin boards were polycarbonate or polypropylene. Was the plastic stiff and brittle (PC) or bendy (PP)?

You can sometimes identify a plastic by its resin identifer. That's a number inside a triangle of arrows (recycle symbol). Not all plastic objects have it.

The thicker board sounds like high density polyethylene. Works well for RF as long as you don't try to solder anything that's in or on it.

Dave Schmarder's tube radios are almost all built on a deck of HDPE over oak. I think he orders it in sheets, though.

Ed AE7TE
On May 14, 2016 2:17 AM, "Rob roomberg@... [regenrx]" <
regenrx@yahoogroups.com> wrote:

>
>
> Is there any way to actually identify what kind of plastic a cutting board
> in made out of?
> I bought 3 different cutting boards.
> Each is a different thickness.... 1/8... 1/4... 1/2 inch.
> Each has different cutting properties.
> The 1/8 and 1/4 melt and bubble a jagged edge when cut with a circular saw
> or drill.
>
> The 1/2 inch cutting board cuts clean like MDF Medium-density
> fibreboard
> and drills clean
> AND
> can be tapped with threads.
> All sorts of radio parts can be made with this stuff.
> I just haven't figured out what temperature it would fail at yet.
>
>
>
> On 05/13/2016 06:29 PM, kevin asato kc6pob@... [regenrx] wrote:
>
>
>
> I'm more of a "purist" and would rather use a real wooden
> breadboard/cutting board to mount the components. Newer, plastic boards
> work as well. Just mount a protoboard strip and tube sockets. The
> protoboard can be any size, not just the one shown in the pictures. If
> using higher voltage tubes (versus teh 12 volt versions used), one must

> keep in mind the interface parameters to modern electronics, especially
> when dealing with microcontrollers and TTL and CMOS type logic which are
> current and (positive) voltage limited..
>
> By making your own board, you are not bound to just using low voltage
> tubes.
> 73,
> kevin
> kc6pob
> ---
>
> Can anyone recommend a tube based experimenter board like
> this one?
>
> This is the first one I ever saw and the web site is in
> German so I'm not
>
> understanding much there.
>
>
>
>
>

26412. Re: [regenrx] bread board plastic cutting board

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-15 08:09:54 UTC
From: Rob
Topic: 26366 Message: 26412

Complete top deck made of plastic........
I had not thought of that at all.
I am using the 1/2 inch thick cutting board plastic as the end pieces to make butterfly
air tuning capacitors and filament rheostats fashioned after the cap ceramic end plates
and fiberboard and phenolic flat parts in rheostats.

http://makearadio.com/tube/2-6c4.php

On 05/15/2016 01:57 AM, J Ed jedwardsat1@... [regenrx] wrote:
> Dave Schmarder's tube radios are almost all built on a deck of HDPE
> over oak.

26413. Re: [regenrx] lick battery to test it

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-15 08:50:03 UTC
From: Michael
Topic: 26366 Message: 26413

I unpeeled the casing from some dead batteries and found that,
in some cases, it was just the internal contacts that had
corroded. Without top (or tail), they were still good for quite
some time - but needed monitoring :-)

I use a flashlight bulb for a rough check.

When batteries still contained mercury, licking was probably
even less of a good idea. What some from exotic parts might contain,
I know not.

Thanks for the Fifths Circle, Rob. Wish I had had that when
I learned to play the piano at school!

Michael

26414. Re: [regenrx] Re: Vacuum tube experimenter board pocket fire plastic

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-15 11:23:26 UTC
From: Bill Cromwell
Topic: 26366 Message: 26414

Hi Dave,

"So expensive" or not is subjective. I agree they are not the cheapest source of energy. In some of my applications I find them reasonable. In those applications I don't use the 9-volt batteries that cost five bucks each. The ones I buy are alkaline batteries at just over one dollar each. I use them in series stacks to give me 45 or 90 volts. The most used application here is operating vacuum tube receivers (B+) and the bulk of that has been the six-tube "ARC-5" command receiver superhets. At 90 volts those draw about 16 milliamps from the B+ line. At 45 volts I measure one half of that at about 8 milliamps. The batteries last several weeks (months) at an hour or two per night. The heaters are operated from 12 volts sealed lead-acid rechargeable batteries. Except for the "battery tubes" the heaters are the real hungry parts. There is no way to make tubes as efficient as transistors. But they are fun to play with.

When the electric utility drops the load (happens in batches of 3 to 8 days out here) the batteries don't notice. When there is crud (awful noises) on the power lines the batteries eliminate one means of injecting that noise into the receiver. The voltage does not wander up and down as the local load on the power lines do so one source of drift is eliminated. I can operate those radios at the park on a picnic table without an extension cord. I initially tried this out with the power outages in mind to see just how 'bad' those batteries would be. I was surprised to find them not so bad after all. And especially when I observed the benefits.

Some hams use them to power vacuum tube QRP transmitters and similar loads are placed on the batteries. I am going to visit that use, too. There are rechargeable "9-volt" batteries (actually about 8 volts) and those might be more reasonable as to expense. My experience with rechargeable batteries is they don't last as long per charge as the alkaline batteries but can be recharged many times. Lithium technology might give even better results. At this time I don't trust those.

73,

Bill KU8H

On 05/15/2016 12:51 AM, david.newkirk@... [regenrx] wrote:
>
> Rob wrote:
>
>
> > > NOPE... nothing more than a DURACELL coppertop plugged into the

> KNIGHTSMITE
>
> I stand corrected about their short-circuit capacity. I commonly don't
> use 9-V cells (unless equipment calls for them) because they're so
> expensive for the capacity you get. Line-operated power supplies with
> short-circuit shutdown give a false sense of security. My big ICOM
> 30-A supply, with a power switch and terminal posts added so it can be
> used as a bench supply, is so finicky about low-Z loads that it won't
> start up properly just two or three 12.6-V tube heaters preconnected
> at power-up. (As is true of all metals used at incandescence, their
> resistance is much lower cold than hot, so to use that supply to light
> tubes I disconnect the tube-heater load with the supply turned off,
> power up, and then reconnect the load.)
>
> And BTW, not to re-open the discussion of transformerless power
> supplies, but another positive of having transformer between the
> equipment and ac line, even a 1:1 (isolation) job, is that it serves
> as a current limiter in the event of a short circuit on the secondary
> side. Plenty of bad stuff can still happen with a hard, long-term
> short on the secondary side--including the death of the
> transformer--but at least the full capacity of that branch of the line
> (otherwise limited only by a fuse or breaker at the electric panel,
> maybe backed up by the breaker on the outlet strip one may be using)
> isn't available for mischief.
>
> My first and last experiment with a transformerless supply--had plenty
> of event-free All American Five experience with them, but those were
> factory-built jobs--was at age 15 or 16 with a half-wave-rectified
> supply for a portable Boosted Pierce tube transmitter. I thought I'd
> installed sufficient current-limiting resistance in series with the
> (black painted glass) rectifier diode, but after the loud hum and pop
> on power up the diode's two pigtails were just pointing at each across
> space with no diode in between.
>
> Best regards,
>
> Dave
> amateur radio W9BRD
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"Intelligence from the internet is unreliable because we cannot verify it's accuracy nor the author's credentials."

- Julius Caesar

26415. Looking for Testing Tips and Tricks (T^3)

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-15 14:48:05 UTC
From: Suzie Creamcheeze
Topic: 26415 Message: 26415

Greetings and Salutations Dear Friends,

I hope I can phrase this question in a way that will encourage a high signal to noise reply, or replies. ;)

I am a beginning Electronics Hobbyist, interested in learning more about Hobby Electronics by building radios. I do not have a STEM background. I can read and follow directions. Currently, I have a MASTECH MS8264 Digital Multi-Meter, a Siglent SDS1052DL Digital Storage Oscilloscope (50 MHz with Frequency Counter), and a soldering iron. The DSO is relatively new, and I do not know much about how to use it, yet. Any answers that discuss using a DSO would have to include where and how to hook-up the probes, as well as what settings to use. I am willing to build simple test equipment, if necessary. I would prefer to build than purchase because I always learn something new when I build it.

So far, I have built a simple Oatmeal Box Crystal Radio which receives local AM radio broadcast stations attached to a 35 foot random wire antenna and grounded to the copper cold water pipes; as well as "A Simple Regen Radio For Beginners" by Charles Kitchin, which has a 39 inch wire antenna and was built using Manhattan Style Construction. The Crystal Radio is powered by the RF from the antenna, and the Regen Radio is powered by a 9V battery.

I am currently working on a radio kit. The Assembly Instructions recommend building the kit in stages, and testing each stage "function" before starting the next function. However, the instructions do not include any mention of "how" to test each stage function, or what to look for during the test.

So the question I want to ask has to do with HOW to test a stage "function" before proceeding to the next function. The schematic of this radio includes various voltage reference points throughout the stages of the radio, much in the same way that the schematic of the Regen Radio had similar voltage reference points.

It is recommended to begin the build with the Audio Amplifier. I have seen this recommended in other radio builds as well. Evidently, the hum/buzz of an audio signal can be used as a test reference during subsequent stage construction.

Some things seem obvious, for example, to get an Audio Amplifier to work, the Power Supply (battery box, batteries, voltage regulator, and forth) would also have to be temporarily attached to the circuit, even though that step might be the last item in the instructions, when it would be permanently installed.

My question is NOT about how to test each radio stage "function" for this specific radio kit, but rather HOW to test radio stage "functions" for ANY type of radio build, Kit or Scratch-built. For example, "Build the Audio Amplifier first, and use it to test each subsequent stage, by .... (doing this, or this) attaching your DMM to this or that, and looking for .... (this or this), whatever.

I am looking for actual Testing Tips and Tricks that you use when you build a radio, preferably geared towards a beginner who is interested in learning electronics, but doesn't have a STEM background, and is not an Electronics Engineer, but a Hobbyist. Links to relevant web pages or books would also be appreciated. I have access to my local Public Library, and it has an Inter-Library Loan system, which I have used successfully in the past.

I have a few old (1990's) Electronics textbooks on my bookshelf, found at the local used-book emporium for a few dollars, and they cover basic analog electronics. I also recently purchased Experimental Methods in Radio Frequency Design, so I have it, as well, though I must admit, I have not had a chance to thoroughly read it, yet. (There is a schematic for a Regen Radio in it.)

Summary: How do you test each stage "function" of a radio build, as you build the radio, before you build the next stage? (Looking for Testing Tips and Tricks.)

Thanks in advance for your Testing Tips and Tricks (T^3).
SC
--
creamcheeze.suzie@...

26416. Re: [regenrx] Looking for Testing Tips and Tricks (T^3)

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-15 16:05:38 UTC
From: J Ed
Topic: 26415 Message: 26416

An RF probe would help. Most everything in a receiver amplifies. You can use it to detect RF signal passing through the various stages. You just need a germanium diode, a 0.01 uF capacitor, and a 1M resistor.

It's convenient because you can use it with any DMM you may have.

Ed AE7TE
On May 15, 2016 9:48 AM, "Suzie Creamcheeze creamcheeze.suzie@... [regenrx]" <regenrx@yahoogroups.com> wrote:

>
>
> Greetings and Salutations Dear Friends,
>
> I hope I can phrase this question in a way that will encourage a high signal to noise reply, or replies. ;)
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> I am a beginning Electronics Hobbyist, interested in learning more about Hobby Electronics by building radios. I do not have a STEM background. I can read and follow directions. Currently, I have a MASTECH MS8264 Digital Multi-Meter, a Siglent SDS1052DL Digital Storage Oscilloscope (50 MHz with Frequency Counter), and a soldering iron. The DSO is relatively new, and I do not know much about how to use it, yet. Any answers that discuss using a DSO would have to include where and how to hook-up the probes, as well as what settings to use. I am willing to build simple test equipment, if necessary. I would prefer to build than purchase because I always learn something new when I build it.
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> My question is NOT about how to test each radio stage "function" for
> this specific radio kit, but rather HOW to test radio stage
> "functions" for ANY type of radio build, Kit or Scratch-built. For
> example, "Build the Audio Amplifier first, and use it to test each
> subsequent stage, by .... (doing this, or this) attaching your DMM to
> this or that, and looking for .... (this or this), whatever.
>
> I am looking for actual Testing Tips and Tricks that you use when you
> build a radio, preferably geared towards a beginner who is interested
> in learning electronics, but doesn't have a STEM background, and is
> not an Electronics Engineer, but a Hobbyist. Links to relevant web
> pages or books would also be appreciated. I have access to my local
> Public Library, and it has an Inter-Library Loan system, which I have
> used successfully in the past.
>
> I have a few old (1990's) Electronics textbooks on my bookshelf, found
> at the local used-book emporium for a few dollars, and they cover
> basic analog electronics. I also recently purchased Experimental
> Methods in Radio Frequency Design, so I have it, as well, though I
> must admit, I have not had a chance to thoroughly read it, yet. (There
> is a schematic for a Regen Radio in it.)
>
> Summary: How do you test each stage "function" of a radio build, as
> you build the radio, before you build the next stage? (Looking for
> Testing Tips and Tricks.)
>
> Thanks in advance for your Testing Tips and Tricks (T^3).
> SC
> --
> creamcheeze.suzie@...
>
>

26417. Re: Looking for Testing Tips and Tricks (T^3)

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-18 04:29:35 UTC
From: les.au49@...
Topic: 26415 Message: 26417

Hello Suzie,
First, the best two test instruments you have are two eyes properly connected to your brain.

Next, you need a circuit diagram of the item you are testing/fixing.

You need an intuitive understanding of the signal level at each stage of the set - for example 10 microvolts at the aerial, 1 to 400mV in the stages before the detector, 1/2 volt to several volts in the audio stages.

Once you know this, you can select the best instrument to find the fault.
In the front end of the receiver, the signal will be so small you can't measure it - so in this case you must inject a signal and listen for it in the speaker. You can use a good quality signal source (RF oscillator) or you can use a square wave generator built from 2 transistors and a battery.

Experienced troubleshooters begin by injecting a signal into the "middle" of the signal chain. If the set is working AFTER that point you'll hear this in the speaker. In that case you inject a signal into the set 1/4 of the way from the aerial. If the set has a fault AFTER the point where you inject the signal you'll hear nothing. In that case inject a signal into the set 3/4 of the way back from the aerial.

I think you get the idea.

Les

26418. Re: FS: Two Scopes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-18 11:43:14 UTC
From: Bry Carling
Topic: 26353 Message: 26418

Many thanks Les,

Useful information. Yes, the first oscilloscope was sold and the second HP310 I have is a classy
older analog scope. Portable in size which is a plus.

I do have pictures available if you or anyone else would like to see it. I believe it is going to sell for
around $50.00 to some lucky person!

73 - Bry
Re: FS: Two Scopes
Posted by: les.au49@yahoo.com les.au49
Date: Tue May 10, 2016 8:16 pm ((PDT))

Hello Bry,

You might try to be more precise, as there are two model "310" CROs from H.P.
One is a vintage analog animal, probably good to 10 MHz. The second is a digital beast, good to 50MHz.

The second sells from US$200 to $350.

Les

26419. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-18 13:23:15 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 26419

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Toko 10K Plugin Coils.pdf
Uploaded by : cyrodyl <jod2005@...>
Description : Make your own Toko 10K plugin coils

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Toko%2010K%20Plugin%20Coils.pdf

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

cyrodyl <jod2005@...>

26420. Toko 10K Plugin Coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-18 13:33:03 UTC
From: jod2005@...
Topic: 26420 Message: 26420

I have just added a pdf file to the files section, it's called Toko 10K Plugin Coils.pdf

It shows you how to make your own plugin coils.

For anyone that doesn't know...

Toko stopped making the 10K series of coils and they will soon be like Denco coils, impossible to get. There are still some around at present. The High Frequency coils you might be interested in are:

160 meters 1.8 Mhz BKANK3333R (1.8 Mhz)
80 meters 3.5 Mhz BKANK3334R (3.5-15 Mhz)
40 meters 7.0 Mhz BKANK3334R (3.5-15 Mhz)
20 meters 14 Mhz BKXNK3335R (10-22 Mhz)

Having plugin coils allows you to use the same coils across many different projects.

If anyone needs help on an easy way to make the pcb's, I'll post some information on that too.

John

26421. Re: Toko 10K Plugin Coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-18 13:55:49 UTC
From: dawmast@...
Topic: 26420 Message: 26421

Will TOKO also stop manufacturing these red MW oscillator, 455 kHz and 10.7 MHz IF coils?

26422. Ceramic Resonator SW radio a la Peter Parker

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-18 14:24:32 UTC
From: rlpend@...
Topic: 26422 Message: 26422

Hi,

Am I the only other person who built one of these?
If you built one, did you modify anything, install resonator switching, etc?

Thanks

fortney

26423. Re: [regenrx] Ceramic Resonator SW radio a la Peter Parker

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-18 14:32:06 UTC
From: Phil
Topic: 26422 Message: 26423

Isn't Peter Parker also known as "Spiderman". I didn't know he was into
building radios ;-)

Runnin' 'n' duckin' somewhere in Central California. . .

73 From "The Beaconeer's Lair"
Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)

HF/LF RADIOS:
Grundigs: S-350 (~2006), G6 (2011) & S450DLX (2014).
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
Icom: IC-735 Transceiver (~1990).
Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
Icom: IC-7200 Transceiver (~2015).
R-Shack: DX-380 digital portable (~1990).
SDR: Softrock Ensemble II LF (built from a kit 2015).
Zenith: Royal-7000 Transoceanic Portable (~1968).

ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 4 Port Multicoupler, Feeds Antenna to 4 RX's.
HOMEBREW 8 Hz Audio Filter.
Timewave DSP-599zx Audio Filter.
Behringer 1202fx Audio Mixer (for mixing/routing audio).

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

On 5/18/2016 2:24 PM, rlpend@... [regenrx] wrote:
>
> Hi,
>
> Am I the only other person who built one of these?
> If you built one, did you modify anything, install resonator
> switching, etc?
>
> Thanks
>
> fortney
>
>

26424. Re: [regenrx] Ceramic Resonator SW radio a la Peter Parker

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-18 14:47:46 UTC
From: J Ed
Topic: 26422 Message: 26424

There are two Peter Parkers. One has superhuman strength, saves the day, and is generally a legendary figure. The other one is a comic book character.

On May 18, 2016 7:32 AM, "Phil ko6bb1@... [regenrx]" <regenrx@yahoogroups.com> wrote:

>
>
> Isn't Peter Parker also known as "Spiderman". I didn't know he was into
> building radios ;-)
>
> Runnin' 'n' duckin' somewhere in Central California. . .
>
> 73 From "The Beaconeer's Lair"
> Phil, KO6BB
> http://www.qsl.net/ko6bb/ (Web Page)
>
> HF/LF RADIOS:
> Grundigs: S-350 (~2006), G6 (2011) & S450DLX (2014).
> HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
> Icom: IC-735 Transceiver (~1990).
> Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
> Icom: IC-7200 Transceiver (~2015).
> R-Shack: DX-380 digital portable (~1990).
> SDR: Softrock Ensemble II LF (built from a kit 2015).
> Zenith: Royal-7000 Transoceanic Portable (~1968).
>
> ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
> HOMEBREW 4 Port Multicoupler, Feeds Antenna to 4 RX's.
> HOMEBREW 8 Hz Audio Filter.
> Timewave DSP-599zx Audio Filter.
> Behringer 1202fx Audio Mixer (for mixing/routing audio).
>
> ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
> Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
> 37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.
>
> Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh
>
> On 5/18/2016 2:24 PM, rlpend@... [regenrx] wrote:
> >
> > Hi,
> >
> > Am I the only other person who built one of these?
> > If you built one, did you modify anything, install resonator

> > switching, etc?
> >
> > Thanks
> >
> > fortney
> >
> >
>
>
>

26426. Re: [regenrx] Ceramic Resonator SW radio a la Peter Parker

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-18 15:36:39 UTC
From: Michael
Topic: 26422 Message: 26426

Phil, deductions from media reports imply that you should
only post in a derivative of the language of Cervantes.

On 18.05.16 15:32, Phil ko6bb1@... [regenrx] wrote:
>
> Runnin' 'n' duckin' somewhere in Central California. . .
>
> 73 From "The Beaconeer's Lair"
> Phil, KO6BB

26427. Re: [regenrx] Ceramic Resonator SW radio a la Peter Parker

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-18 19:04:48 UTC
From: Russ Williams
Topic: 26422 Message: 26427

Running and ducking behind....uhhh, windmills??

Russ KW6THiding out somewhere in Northern California

From: "Michael michael.setaazul@btopenworld.com [regenrx]" <regenrx@yahoogroups.com>
To: regenrx@yahoogroups.com
Sent: Wednesday, May 18, 2016 8:36 AM
Subject: Re: [regenrx] Ceramic Resonator SW radio a la Peter Parker

  Phil, deductions from media reports imply that you should
only post in a derivative of the language of Cervantes.

On 18.05.16 15:32, Phil ko6bb1@... [regenrx] wrote:
>
> Runnin' 'n' duckin' somewhere in Central California. . .
>
> 73 From "The Beaconeer's Lair"
> Phil, KO6BB

26428. Re: Ceramic Resonator SW radio a la Peter Parker

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-19 13:10:29 UTC
From: Robert L. Pendergast
Topic: 26422 Message: 26428

Thanks for the responses, girls. Are you all drunk?

26429. Re: [regenrx] Ceramic Resonator SW radio a la Peter Parker

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-19 18:44:35 UTC
From: Rob
Topic: 26422 Message: 26429

I didn't build it yet.
I collected all the parts and then had to put away "my stuff" for an XYL
home construction sidetrack.
Seems any time I play with radio she thinks I have something better to do.
I sort of feel like the Planet of the Apes ... don't talk.... don't get
caught playing with any advanced technology.

On 05/18/2016 10:24 AM, rlpend@... [regenrx] wrote:
>
> Hi,
>
> Am I the only other person who built one of these?
> If you built one, did you modify anything, install resonator
> switching, etc?
>
> Thanks
>
> fortney
>
>
>

26430. Re: [regenrx] Ceramic Resonator SW radio a la Peter Parker

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-19 19:04:33 UTC
From: Leonard Meek
Topic: 26422 Message: 26430

Don't feel pregnant, old man. A lot of us are in the same boat.

Leonard

----- Original Message -----
From: Rob roomberg@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Thursday, May 19, 2016 8:44 AM
Subject: Re: [regenrx] Ceramic Resonator SW radio a la Peter Parker

I didn't build it yet.
I collected all the parts and then had to put away "my stuff" for an XYL home construction sidetrack.
Seems any time I play with radio she thinks I have something better to do.
I sort of feel like the Planet of the Apes ... don't talk.... don't get caught playing with any advanced technology.

On 05/18/2016 10:24 AM, rlpend@... [regenrx] wrote:

Hi,

Am I the only other person who built one of these?
If you built one, did you modify anything, install resonator switching, etc?

Thanks

fortney

26431. 'Novice Pair' surfaces

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-19 19:40:58 UTC
From: Hubert Miller
Topic: 26431 Message: 26431

I recently bought an example of the QST 'Novice Pair', so after half a century of thinking about that project, i don't have to actually do the metal

work that so daunted me ages ago. The pair look pretty well built, neatly done, except for a couple "oopsies". The receiver has two knobs flanking

the central vernier drive tuning, but somehow the builder couldn't get the two flanking knobs at the same level, even though one is a pot, so has

freedom to be placed anywhere. The detector tube has a ceramic tube socket, while the audio tube is the common bakelite or whatever that

material is, in the wafer-type sockets. I only got one coil, so i'll be among those looking for 20 MEL and 10 MEL B&W coils.

The transmitter i noticed, the wooden dowel that supports the output coil is not varnished or otherwise treated. The dowel is of narrower

diameter than the coil, and i noted that what looks like lollipop sticks inserted between coil and dowel to hold the coil in place. That will have

to done better. Also the miniductor type coil, the plastic support strips have pretty much disintegrated. I have seen this before. I don't know if

that's a reaction to specific climate conditions or if it invariably occurs over time. I did not get any kind of power supply with the two, so that

will become my part of the Novice Pair project.

Oh yeah - i noted that the front panels are attached by those hex-head sheet metal screws seen on the back of older TVs and other such electronics. Definitely not a good touch, looks cheezy, and that can do with an improvement too.

Photos will be done - eventually.

Probably not very many of these were actually built, i suppose, altho everyone seems to have read about them.

There's the original, of course; this pair here; and another shown on the Glowbugs googlegroup recently, at least.

-Hue Miller

26432. RE: [regenrx] Ceramic Resonator SW radio a la Peter Parker

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-19 19:36:50 UTC
From: Larry
Topic: 26422 Message: 26432

I had an XYL like that. YOU! Sit over there and wait for me to tell you what to do!

Got rid of all the wives, I live in the woods and have a 50 X 30 foot shop! Yeah!

Larry

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Thursday, May 19, 2016 2:45 PM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Ceramic Resonator SW radio a la Peter Parker

I didn't build it yet.
I collected all the parts and then had to put away "my stuff" for an XYL home construction sidetrack.
Seems any time I play with radio she thinks I have something better to do.
I sort of feel like the Planet of the Apes ... don't talk.... don't get caught playing with any advanced technology.

On 05/18/2016 10:24 AM, rlpend@... [regenrx] wrote:

Hi,

Am I the only other person who built one of these?
If you built one, did you modify anything, install resonator switching, etc?

Thanks

fortney

26433. Re: [regenrx] Ceramic Resonator SW radio a la Peter Parker

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-20 00:55:38 UTC
From: Leonard Meek
Topic: 26422 Message: 26433

Some people have all the luck.

Leonard

----- Original Message -----
From: 'Larry' lbeaty@... [regenrx]
To: regenrx@...m
Sent: Thursday, May 19, 2016 9:36 AM
Subject: RE: [regenrx] Ceramic Resonator SW radio a la Peter Parker

I had an XYL like that. YOU! Sit over there and wait for me to tell you what to do!

Got rid of all the wives, I live in the woods and have a 50 X 30 foot shop! Yeah!

Larry

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Thursday, May 19, 2016 2:45 PM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Ceramic Resonator SW radio a la Peter Parker

I didn't build it yet.
I collected all the parts and then had to put away "my stuff" for an XYL home construction sidetrack.
Seems any time I play with radio she thinks I have something better to do.
I sort of feel like the Planet of the Apes ... don't talk.... don't get caught playing with any advanced technology.

On 05/18/2016 10:24 AM, rlpend@... [regenrx] wrote:

Hi,

Am I the only other person who built one of these?
If you built one, did you modify anything, install resonator switching, etc?

Thanks

fortney

26434. Re: [regenrx] Ceramic Resonator SW radio a la Peter Parker

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-20 04:49:56 UTC
From: Rob
Topic: 26422 Message: 26434

Its not quite that bad here.
I used to hole up in a tiny radio shack but then I spread out when the
kids all grew up and moved away.
I told her that I pay the mortgage for ALL the house so don't give me
crap for using ALL the house.
So now I have to resort to playing in a cramped radio shack again.
No big deal.
I spent most of the winter spread out all over the living room......
under constant observation...... not supervision.

I'm not fast... but I am crafty:

http://www.learnmorsecode.com/gable/index.html

On 05/19/2016 03:36 PM, 'Larry' lbeaty@... [regenrx] wrote:
>
> I had an XYL like that. YOU! Sit over there and wait for me to
> tell you what to do!
>
> Got rid of all the wives, I live in the woods and have a 50 X 30 foot
> shop! Yeah!
>
> Larry
>
> *From:*regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
> *Sent:* Thursday, May 19, 2016 2:45 PM
> *To:* regenrx@yahoogroups.com
> *Subject:* Re: [regenrx] Ceramic Resonator SW radio a la Peter Parker
>
> I didn't build it yet.
> I collected all the parts and then had to put away "my stuff" for an
> XYL home construction sidetrack.
> Seems any time I play with radio she thinks I have something better to do.
> I sort of feel like the Planet of the Apes ... don't talk.... don't
> get caught playing with any advanced technology.
>
> On 05/18/2016 10:24 AM, rlpend@... <mailto:rlpend@...>
> [regenrx] wrote:
>
> Hi,
>
> Am I the only other person who built one of these?
> If you built one, did you modify anything, install resonator
> switching, etc?
>
> Thanks

>
> fortney
>
>

26435. RE: [regenrx] Ceramic Resonator SW radio a la Peter Parker

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-20 13:11:29 UTC
From: Larry
Topic: 26422 Message: 26435

(I don’t know your name), awesome! Well done. Looks like a neat radio shack!

Larry

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Friday, May 20, 2016 12:50 AM
To: regenrx@...m
Subject: Re: [regenrx] Ceramic Resonator SW radio a la Peter Parker

Its not quite that bad here.
I used to hole up in a tiny radio shack but then I spread out when the kids all grew up and moved away.
I told her that I pay the mortgage for ALL the house so don't give me crap for using ALL the house.
So now I have to resort to playing in a cramped radio shack again.
No big deal.
I spent most of the winter spread out all over the living room..... under constant observation..... not supervision.

I'm not fast... but I am crafty:

http://www.learnmorsecode.com/gable/index.html

On 05/19/2016 03:36 PM, 'Larry' lbeaty@... [regenrx] wrote:

I had an XYL like that. YOU! Sit over there and wait for me to tell you what to do!

Got rid of all the wives, I live in the woods and have a 50 X 30 foot shop! Yeah!

Larry

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Thursday, May 19, 2016 2:45 PM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Ceramic Resonator SW radio a la Peter Parker

I didn't build it yet.
I collected all the parts and then had to put away "my stuff" for an XYL home construction sidetrack.
Seems any time I play with radio she thinks I have something better to do.
I sort of feel like the Planet of the Apes ... don't talk.... don't get caught playing with any advanced technology.

On 05/18/2016 10:24 AM, rlpend@... [regenrx] wrote:

Hi,

Am I the only other person who built one of these?
If you built one, did you modify anything, install resonator switching, etc?

Thanks

fortney

26436. is it OK to use two 12 volt transformers to make 170 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-20 18:25:55 UTC
From: Rob
Topic: 26436 Message: 26436

Is it OK to use two 12 volt transformers to make 170 volts as shown in
this circuit?

12AV6 Vacuum Tube Radio shown here
http://www.bristolwatch.com/radio/index.htm

that uses a power supply built with TWO 12 volt transformers
that normally get used to step down 110 mains socket voltage to 12 volts.
++
http://www.bristolwatch.com/radio/tube_ps.gif
Pins 3 and 4 on the tube are the filament and require 12.6 volts AC or
DC. The power supply for the plate can be 150 to 170 volts. (This is a
seven pin vacuum tube.) The circuit above uses two 120 to 12.6 volt step
down transformers. By connecting the two transformers "back to back"
this serves to isolate the project from the power line to prevent
electric shock or having a "HOT" ground.
++

I have not seen this done like this before.
Is there any reason..electronically .... to NOT do this ?

Also..... the diode specified is a 1N4001.
I have 1N4003 and 1N4007 diodes..... is it OK to replace that 1N4001
diode with a 1N4003 or 1N4007 diode?

26437. Re: [regenrx] is it OK to use two 12 volt transformers to make 170 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-20 18:59:01 UTC
From: Paul Martin
Topic: 26436 Message: 26437

Yes to both questions. It'll work fine.
Paul N8ULS

On Friday, May 20, 2016 2:25 PM, "Rob roomberg@... [regenrx]" <regenrx@yahoogroups.com> wrote:

  Is it OK to use two 12 volt transformers to make 170 volts as shown in this circuit?

12AV6 Vacuum Tube Radio shown here
http://www.bristolwatch.com/radio/index.htm

that uses a power supply built with TWO 12 volt transformers
that normally get used to step down 110 mains socket voltage to 12 volts.
++
http://www.bristolwatch.com/radio/tube_ps.gif
Pins 3 and 4 on the tube are the filament and require 12.6 volts AC or DC. The power supply for the plate can be 150 to 170 volts. (This is a seven pin vacuum tube.) The circuit above uses two 120 to 12.6 volt step down transformers. By connecting the two transformers "back to back" this serves to isolate the project from the power line to prevent electric shock or having a "HOT" ground.
++

I have not seen this done like this before.
Is there any reason..electronically .... to NOT do this ?

Also..... the diode specified is a 1N4001.
I have 1N4003 and 1N4007 diodes..... is it OK to replace that 1N4001 diode with a 1N4003 or 1N4007 diode?

26438. Re: [regenrx] is it OK to use two 12 volt transformers to make 170 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-20 19:24:18 UTC
From: J Ed
Topic: 26436 Message: 26438

This works fine for low power or experimentation. I have a 220v to 110v transformer that I'm going to use backward to make a roughly 300v supply. It's a 300 VA transformer and I imagine I'll get more than enough power for anything.

A single 12AV6 is going to draw so little current that a pile of 9v batteries would last for a while. Still, if you want to use the back to back transformer method, you'll be pleased.

Ed AE7TE

Yes to both questions. It'll work fine.

Paul N8ULS

On Friday, May 20, 2016 2:25 PM, "Rob roomberg@... [regenrx]" <regenrx@yahoogroups.com> wrote:

Is it OK to use two 12 volt transformers to make 170 volts as shown in this circuit?

12AV6 Vacuum Tube Radio shown here
http://www.bristolwatch.com/radio/index.htm

that uses a power supply built with TWO 12 volt transformers
that normally get used to step down 110 mains socket voltage to 12 volts.
++
http://www.bristolwatch.com/radio/tube_ps.gif
Pins 3 and 4 on the tube are the filament and require 12.6 volts AC or DC. The power supply for the plate can be 150 to 170 volts. (This is a seven pin vacuum tube.) The circuit above uses two 120 to 12.6 volt step down transformers. By connecting the two transformers "back to back" this serves to isolate the project from the power line to prevent electric shock or having a "HOT" ground.
++

I have not seen this done like this before.
Is there any reason..electronically .... to NOT do this ?

Also..... the diode specified is a 1N4001.
I have 1N4003 and 1N4007 diodes..... is it OK to replace that 1N4001 diode with a 1N4003 or 1N4007 diode?

26439. Re: [regenrx] is it OK to use two 12 volt transformers to make 170 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-20 19:48:06 UTC
From: Rob
Topic: 26436 Message: 26439

The pile of 9 volt batteries solution has been my sole TUBE operating B+ power source
for the last year of fooling around with tubes. Seems that FIVE 9 volt batteries is pretty safe to play with.
TEN in series fires my spark gap transmitter. Always a hit with the kiddies. Something about fire.

I'm more of the transistor baby generation dabbling with 9 volt batteries regulated by 5 volt regulators to
power transistor circuits and PIC microcontrollers.
I have collected a few transformers to delve into learning tube circuits but I have not hooked anything to mains power yet....mostly because I want to live a little bit longer. I have vision problems so I was trying to learn how to play
with bigger radio components instead of crumbs like SMD.... but bigger usually means killer voltages instead of
battery power.

One of my transformers weighs 40 pounds.

I was mostly wondering if brand new transformers easily obtained... such as these 12 volt transformers...
would do the trick instead of relying on specialty transformers.
Its a question of repeatability. If I do build a radio and my radio club guys get interested in doing it
I didn't want to say its a "one off" because you can't just walk into the hardware store and get the parts.

On 05/20/2016 03:24 PM, J Ed jedwardsat1@... [regenrx] wrote:
>
> This works fine for low power or experimentation. I have a 220v to
> 110v transformer that I'm going to use backward to make a roughly 300v
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> A single 12AV6 is going to draw so little current that a pile of 9v
> batteries would last for a while. Still, if you want to use the back
> to back transformer method, you'll be pleased.
>
> Ed AE7TE
>
> Yes to both questions. It'll work fine.
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> Paul N8ULS
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> On Friday, May 20, 2016 2:25 PM, "Rob roomberg@...
> <mailto:roomberg@...> [regenrx]" <regenrx@yahoogroups.com
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> Also...... the diode specified is a 1N4001.
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> diode with a 1N4003 or 1N4007 diode?
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26440. Re: [regenrx] is it OK to use two 12 volt transformers to make 170 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-20 20:27:48 UTC
From: J Ed
Topic: 26436 Message: 26440

Yeah.

You can place two 16v, 10va doorbell transformers, or any other pair of transformers, back to back and get roughly 180v. Just remember that if you use capacitors, place a resistor across them so the charge bleeds off once you turn power off.

The first time I did this was with two 12v, 1a transformers. As long as you're not trying to get more than 50 ma or so, you're going to be fine. You can also use 12v from the center of the transformers to heat the tube.

If you want to make measurements, use alligator clips and don't touch anything until the power is off.

Ed AE7TE
On May 20, 2016 12:48 PM, "Rob roomberg@... [regenrx]" <
regenrx@yahoogroups.com> wrote:

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26441. Re: [regenrx] is it OK to use two 12 volt transformers to make 170 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-21 03:40:01 UTC
From: Rob
Topic: 26436 Message: 26441

DOORBELL transformers.....YES..... thats what I wanted to hear!

As I delve into the exotic world of NEW OLD STOCK and find that YES I
can buy
brand new tubes from Russia for $2 .... and its easy enough to blow $10 on
5 tubes... and have spares to boot......
I don't have that kind of luck with transformer pricing.
Seems transformers hold their value and cost more than I want to spend
to stock up on any kind of pile of them
to share with fellow hams experimenting.

But to find on EBAY

110VAC Power Supply Transformer 12V*2 DOUB 12VAC 5W

for $13 isn't so cost prohibitive to sew together TWO of them back to back

and still end up spending less than half as much as the

https://www.tubesandmore.com prices for transformers.

I just can tell a new ham that he has to spend $60 to build a power
supply for an experimental radio.

About that bleeder resister advice....

when you say place....
do you mean permanently solder into the circuit?
Or did you mean short the capacitors with a resister to discharge it
instead of getting surprised or killed by it?
What value resister?

On 05/20/2016 04:27 PM, J Ed jedwardsat1@... [regenrx] wrote:
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> Yeah.
>
> You can place two 16v, 10va doorbell transformers, or any other pair
> of transformers, back to back and get roughly 180v. Just remember that
> if you use capacitors, place a resistor across them so the charge
> bleeds off once you turn power off.
>
> The first time I did this was with two 12v, 1a transformers. As long
> as you're not trying to get more than 50 ma or so, you're going to be
> fine. You can also use 12v from the center of the transformers to heat
> the tube.
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> If you want to make measurements, use alligator clips and don't touch

> anything until the power is off.
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> Ed AE7TE
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> TEN in series fires my spark gap transmitter. Always a hit with
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> batteries regulated by 5 volt regulators to
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26442. Re: [regenrx] is it OK to use two 12 volt transformers to make 170 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-21 03:41:42 UTC
From: Rob
Topic: 26436 Message: 26442

thats supposed to say I just CAN NOT tell a ham..... not CAN

On 05/20/2016 11:40 PM, Rob roomberg@... [regenrx] wrote:
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> DOORBELL transformers.....YES..... thats what I wanted to hear!
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26443. Re: [regenrx] is it OK to use two 12 volt transformers to make 170 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-21 04:23:35 UTC
From: J Ed
Topic: 26436 Message: 26443

Alright...

I'd advise you to make an audio amplifier in your power supply. If you're going to make numerous radio circuits, that is something you'll want to build once and not for every radio. You will need a transformer for audio output, which can be scavenged from a dead tube radio. If nothing else, look for a 70v, 10w speaker transformer. Although they aren't great for audio, they are cheap and will do well for a watt of audio power. The tube can be a 12V6, 12A6, or another power output tube. There are plenty of 12v filament tubes that can serve as output amplifiers. Bias the plate current to 15-20 mA. The amplifier can be in the same chassis as the power supply. This will make experimenting easy.

I'd look for something more robust than a 5w transformer. You could probably get a 12 to 20 watt transformer for about 15 dollars.

The bleeder resistor is a part of every power supply and serves to drain the capacitors when you turn off power. They are permanently soldered across the capacitors. For a 180v supply, a 100k resistor would make a steady current of around 2 mA, which always flows. If you have a 47uF filter capacitor, the charge bleeds off in 20s. If the capacitor is 100uF the charge drains in 40s. You don't want the current to be so high that it takes up most of the power supply's energy. Use two 220k, 1/2w resistors in parallel.

You could also put a 1/4w 10 ohm resistor in series with the output. Under normal current (20 to 50 mA), the voltage and power lost in this resistor is minimal. If a fault occurs in your radio, the resistor will see a much higher current and burn out. That will save your rectifier and transformer from excessive current. Consider it a cheap, low current fuse.

Ed AE7TE
On May 20, 2016 8:41 PM, "Rob roomberg@... [regenrx]" <
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26444. re: I'd advise you to make an audio amplifier in your power supply.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-21 05:09:05 UTC
From: Rob
Topic: 26436 Message: 26444

re:
I'd advise you to make an audio amplifier in your power supply.

That is a very good idea.
I may get to do that.

Many years ago I started looking into tube technology and was really lost.
I just never could spend the study time to pursue understanding it.
But I did collect the hard to find parts.... power and audio
output..Thordarson? transformers.
AND
a varying mix of tubes.

So I actually could , now, without resorting to using doorbell
transformers....
I could do what you suggested and build a new old stock power supply and
audio amplifier to
use in all future experiments.

I was contemplating the door bell transformer idea just to show newbies
it could be done.

Thanks for the detailed advice. I do need it.

As far as the idea of getting anything from a dead tube radio goes....
a bunch of guys recommended re-purposing parts .....variable air
caps... from old radios
BUT
WHERE do you get dead tube radios?
Dead tube radios are not very much available where I live.

On 05/21/2016 12:23 AM, J Ed jedwardsat1@... [regenrx] wrote:
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> Alright...
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> I'd advise you to make an audio amplifier in your power supply. If
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> transformer for audio output, which can be scavenged from a dead tube
> radio. If nothing else, look for a 70v, 10w speaker transformer.
> Although they aren't great for audio, they are cheap and will do well
> for a watt of audio power. The tube can be a 12V6, 12A6, or another
> power output tube. There are plenty of 12v filament tubes that can
> serve as output amplifiers. Bias the plate current to 15-20 mA. The
> amplifier can be in the same chassis as the power supply. This will
> make experimenting easy.
>

> I'd look for something more robust than a 5w transformer. You could
> probably get a 12 to 20 watt transformer for about 15 dollars.
>
> The bleeder resistor is a part of every power supply and serves to
> drain the capacitors when you turn off power. They are permanently
> soldered across the capacitors. For a 180v supply, a 100k resistor
> would make a steady current of around 2 mA, which always flows. If you
> have a 47uF filter capacitor, the charge bleeds off in 20s. If the
> capacitor is 100uF the charge drains in 40s. You don't want the
> current to be so high that it takes up most of the power supply's
> energy. Use two 220k, 1/2w resistors in parallel.
>
> You could also put a 1/4w 10 ohm resistor in series with the output.
> Under normal current (20 to 50 mA), the voltage and power lost in this
> resistor is minimal. If a fault occurs in your radio, the resistor
> will see a much higher current and burn out. That will save your
> rectifier and transformer from excessive current. Consider it a cheap,
> low current fuse.
>
> Ed AE7TE
>
> On May 20, 2016 8:41 PM, "Rob roomberg@...
> <mailto:roomberg@...> [regenrx]" <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>> wrote:
>
> thats supposed to say I just CAN NOT tell a ham..... not CAN
>
> On 05/20/2016 11:40 PM, Rob roomberg@...
> <mailto:roomberg@...> [regenrx] wrote:
>>
>> DOORBELL transformers.....YES..... thats what I wanted to hear!
>>
>> As I delve into the exotic world of NEW OLD STOCK and find that
>> YES I can buy
>> brand new tubes from Russia for $2 .... and its easy enough to
>> blow $10 on
>> 5 tubes... and have spares to boot......
>> I don't have that kind of luck with transformer pricing.
>> Seems transformers hold their value and cost more than I want to
>> spend to stock up on any kind of pile of them
>> to share with fellow hams experimenting.
>>
>> But to find on EBAY
>>
>> 110VAC Power Supply Transformer 12V*2 DOUB 12VAC 5W
>>
>> for $13 isn't so cost prohibitive to sew together TWO of them
>> back to back
>>
>> and still end up spending less than half as much as the

>>
>> https://www.tubesandmore.com prices for transformers.
>>
>>
>> I just can tell a new ham that he has to spend $60 to build a
>> power supply for an experimental radio.
>>
>> About that bleeder resister advice....
>>
>> when you say place....
>> do you mean permanently solder into the circuit?
>> Or did you mean short the capacitors with a resister to discharge
>> it instead of getting surprised or killed by it?
>> What value resister?
>>
>>
>>
>> On 05/20/2016 04:27 PM, J Ed jedwardsat1@...
>> <mailto:jedwardsat1@...> [regenrx] wrote:
>>>
>>> Yeah.
>>>
>>> You can place two 16v, 10va doorbell transformers, or any other
>>> pair of transformers, back to back and get roughly 180v. Just
>>> remember that if you use capacitors, place a resistor across
>>> them so the charge bleeds off once you turn power off.
>>>
>>> The first time I did this was with two 12v, 1a transformers. As
>>> long as you're not trying to get more than 50 ma or so, you're
>>> going to be fine. You can also use 12v from the center of the
>>> transformers to heat the tube.
>>>
>>> If you want to make measurements, use alligator clips and don't
>>> touch anything until the power is off.
>>>
>>> Ed AE7TE
>>>
>>> On May 20, 2016 12:48 PM, "Rob roomberg@...
>>> <mailto:roomberg@...> [regenrx]" <regenrx@yahoogroups.com
>>> <mailto:regenrx@yahoogroups.com>> wrote:
>>>
>>> The pile of 9 volt batteries solution has been my sole TUBE
>>> operating B+ power source
>>> for the last year of fooling around with tubes. Seems that
>>> FIVE 9 volt batteries is pretty safe to play with.
>>> TEN in series fires my spark gap transmitter. Always a hit
>>> with the kiddies. Something about fire.
>>>
>>> I'm more of the transistor baby generation dabbling with 9
>>> volt batteries regulated by 5 volt regulators to

>>> power transistor circuits and PIC microcontrollers.
>>> I have collected a few transformers to delve into learning
>>> tube circuits but I have not hooked anything to mains power
>>> yet....mostly because I want to live a little bit longer. I
>>> have vision problems so I was trying to learn how to play
>>> with bigger radio components instead of crumbs like SMD....
>>> but bigger usually means killer voltages instead of
>>> battery power.
>>>
>>> One of my transformers weighs 40 pounds.
>>>
>>> I was mostly wondering if brand new transformers easily
>>> obtained... such as these 12 volt transformers...
>>> would do the trick instead of relying on specialty transformers.
>>> Its a question of repeatability. If I do build a radio and
>>> my radio club guys get interested in doing it
>>> I didn't want to say its a "one off" because you can't just
>>> walk into the hardware store and get the parts.
>>>
>>>
>>>
>>> On 05/20/2016 03:24 PM, J Ed jedwardsat1@...
>>> <mailto:jedwardsat1@...> [regenrx] wrote:
>>>>
>>>> This works fine for low power or experimentation. I have a
>>>> 220v to 110v transformer that I'm going to use backward to
>>>> make a roughly 300v supply. It's a 300 VA transformer and I
>>>> imagine I'll get more than enough power for anything.
>>>>
>>>> A single 12AV6 is going to draw so little current that a
>>>> pile of 9v batteries would last for a while. Still, if you
>>>> want to use the back to back transformer method, you'll be
>>>> pleased.
>>>>
>>>> Ed AE7TE
>>>>
>>>> Yes to both questions. It'll work fine.
>>>>
>>>> Paul N8ULS
>>>>
>>>>
>>>> On Friday, May 20, 2016 2:25 PM, "Rob roomberg@...
>>>> <mailto:roomberg@...> [regenrx]"
>>>> <regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>>
>>>> wrote:
>>>>
>>>>
>>>> Is it OK to use two 12 volt transformers to make 170 volts
>>>> as shown in
>>>> this circuit?

>>>>
>>>> 12AV6 Vacuum Tube Radio shown here
>>>> http://www.bristolwatch.com/radio/index.htm
>>>>
>>>> that uses a power supply built with TWO 12 volt transformers
>>>> that normally get used to step down 110 mains socket
>>>> voltage to 12 volts.
>>>> ++
>>>> http://www.bristolwatch.com/radio/tube_ps.gif
>>>> Pins 3 and 4 on the tube are the filament and require 12.6
>>>> volts AC or
>>>> DC. The power supply for the plate can be 150 to 170 volts.
>>>> (This is a
>>>> seven pin vacuum tube.) The circuit above uses two 120 to
>>>> 12.6 volt step
>>>> down transformers. By connecting the two transformers "back
>>>> to back"
>>>> this serves to isolate the project from the power line to
>>>> prevent
>>>> electric shock or having a "HOT" ground.
>>>> ++
>>>>
>>>> I have not seen this done like this before.
>>>> Is there any reason..electronically .... to NOT do this ?
>>>>
>>>> Also..... the diode specified is a 1N4001.
>>>> I have 1N4003 and 1N4007 diodes..... is it OK to replace
>>>> that 1N4001
>>>> diode with a 1N4003 or 1N4007 diode?
>>>>
>>>>
>>>>
>>>
>>
>
>

26445. Re: [regenrx] re: I'd advise you to make an audio amplifier in your power supply.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-21 05:22:14 UTC
From: J Ed
Topic: 26436 Message: 26445

On May 20, 2016 10:09 PM, "Rob roomberg@... [regenrx]" <
regenrx@yahoogroups.com> wrote:
>
>
>
> re:
> I'd advise you to make an audio amplifier in your power supply.
> That is a very good idea.
> I may get to do that.
>
> Many years ago I started looking into tube technology and was really lost.
> I just never could spend the study time to pursue understanding it.
> But I did collect the hard to find parts.... power and audio
output..Thordarson? transformers.
> AND a varying mix of tubes.

Tube circuits are much simpler than transistors. If you want to get started
then you definitely should start with a simple power supply like this and
then you can trade up later.

> So I actually could , now, without resorting to using doorbell
transformers....
> I could do what you suggested and build a new old stock power supply and
audio amplifier to
> use in all future experiments.

You can do it any way you want. There's nothing magical about a transformer
from, say, Hammond. Also, look at Antek toroidal transformers. They offer a
pretty good power for cost.

> I was contemplating the door bell transformer idea just to show newbies
it could be done.

Not a bad idea. It was the way I started.

> Thanks for the detailed advice. I do need it.

There's plenty where that came from.

> As far as the idea of getting anything from a dead tube radio goes....
> a bunch of guys recommended re-purposing parts .....variable air
caps... from old radios
> BUT
> WHERE do you get dead tube radios?
> Dead tube radios are not very much available where I live.

Hard to say. They tend to show up in the oddest places. Other hams might have the parts you need. I am getting a massive choke for the cost of shipping from another mentor. You just have to keep looking.

Ed AE7TE

> On 05/21/2016 12:23 AM, J Ed jedwardsat1@... [regenrx] wrote:
>>
>>
>>
>> Alright...
>>
>> I'd advise you to make an audio amplifier in your power supply. If you're going to make numerous radio circuits, that is something you'll want to build once and not for every radio. You will need a transformer for audio output, which can be scavenged from a dead tube radio. If nothing else, look for a 70v, 10w speaker transformer. Although they aren't great for audio, they are cheap and will do well for a watt of audio power. The tube can be a 12V6, 12A6, or another power output tube. There are plenty of 12v filament tubes that can serve as output amplifiers. Bias the plate current to 15-20 mA. The amplifier can be in the same chassis as the power supply. This will make experimenting easy.
>>
>> I'd look for something more robust than a 5w transformer. You could probably get a 12 to 20 watt transformer for about 15 dollars.
>>
>> The bleeder resistor is a part of every power supply and serves to drain the capacitors when you turn off power. They are permanently soldered across the capacitors. For a 180v supply, a 100k resistor would make a steady current of around 2 mA, which always flows. If you have a 47uF filter capacitor, the charge bleeds off in 20s. If the capacitor is 100uF the charge drains in 40s. You don't want the current to be so high that it takes up most of the power supply's energy. Use two 220k, 1/2w resistors in parallel.
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>> You could also put a 1/4w 10 ohm resistor in series with the output. Under normal current (20 to 50 mA), the voltage and power lost in this resistor is minimal. If a fault occurs in your radio, the resistor will see a much higher current and burn out. That will save your rectifier and transformer from excessive current. Consider it a cheap, low current fuse.
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>>>> 5 tubes... and have spares to boot......
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>>>> for $13 isn't so cost prohibitive to sew together TWO of them back to
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>>>> What value resister?
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>>>>> Yeah.
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>>>>> You can place two 16v, 10va doorbell transformers, or any other pair
of transformers, back to back and get roughly 180v. Just remember that if
you use capacitors, place a resistor across them so the charge bleeds off
once you turn power off.
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>>>>> The first time I did this was with two 12v, 1a transformers. As long as you're not trying to get more than 50 ma or so, you're going to be fine. You can also use 12v from the center of the transformers to heat the tube.
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>>>>> If you want to make measurements, use alligator clips and don't touch anything until the power is off.
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>>>>>> I'm more of the transistor baby generation dabbling with 9 volt batteries regulated by 5 volt regulators to
>>>>>> power transistor circuits and PIC microcontrollers.
>>>>>> I have collected a few transformers to delve into learning tube circuits but I have not hooked anything to mains power yet....mostly because I want to live a little bit longer. I have vision problems so I was trying to learn how to play
>>>>>> with bigger radio components instead of crumbs like SMD.... but bigger usually means killer voltages instead of
>>>>>> battery power.
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>>>>>> One of my transformers weighs 40 pounds.
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>>>>>> I was mostly wondering if brand new transformers easily obtained... such as these 12 volt transformers...
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>>>>>> Its a question of repeatability. If I do build a radio and my radio club guys get interested in doing it
>>>>>> I didn't want to say its a "one off" because you can't just walk into the hardware store and get the parts.
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>>>>>> On 05/20/2016 03:24 PM, J Ed jedwardsat1@... [regenrx] wrote:
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>>>>>>> This works fine for low power or experimentation. I have a 220v to 110v transformer that I'm going to use backward to make a roughly 300v

supply. It's a 300 VA transformer and I imagine I'll get more than enough
power for anything.
>>>>>>>
>>>>>>> A single 12AV6 is going to draw so little current that a pile of 9v
batteries would last for a while. Still, if you want to use the back to
back transformer method, you'll be pleased.
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>>>>>>> Ed AE7TE
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>>>>>>> Yes to both questions. It'll work fine.
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>>>>>>> that uses a power supply built with TWO 12 volt transformers
>>>>>>> that normally get used to step down 110 mains socket voltage to 12
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>>>>>>> http://www.bristolwatch.com/radio/tube_ps.gif
>>>>>>> Pins 3 and 4 on the tube are the filament and require 12.6 volts AC
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>>>>>>> seven pin vacuum tube.) The circuit above uses two 120 to 12.6 volt
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>>>>>>> down transformers. By connecting the two transformers "back to
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>>>>>>> this serves to isolate the project from the power line to prevent
>>>>>>> electric shock or having a "HOT" ground.
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>>>>>>>
>>>>>>> I have not seen this done like this before.
>>>>>>> Is there any reason..electronically .... to NOT do this ?
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>>>>>>> Also..... the diode specified is a 1N4001.
>>>>>>> I have 1N4003 and 1N4007 diodes..... is it OK to replace that
1N4001

>>>>>>> diode with a 1N4003 or 1N4007 diode?
>>>>>>>
>>>>>>>
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>
>

26446. Re: [regenrx] re: I'd advise you to make an audio amplifier in your power supply.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-21 11:03:19 UTC
From: Bill Cromwell
Topic: 26436 Message: 26446

Hi Rob,

On 05/21/2016 01:09 AM, Rob roomberg@... [regenrx] wrote:
>
> ---snip-----
>
> As far as the idea of getting anything from a dead tube radio goes....
> a bunch of guys recommended re-purposing parts .....variable air
> caps... from old radios
> BUT
> WHERE do you get dead tube radios?
> Dead tube radios are not very much available where I live.
>
------snip---

I find them at garage and rummage sales held on peoples' front lawns or in their um..garages. I get them for a dollar or less. If they are in good condition and the sellers can deomnstrate that they work (antique collector items) they want more money. Those are not the dead junk we are talking about..pass them by. We really don't want to wreck working radios.

Don't overlook the AM-FM-(possibly short wave) radios. They have more RF parts in them. Most of them have isolation transformers in the power supplies. Another good choice is the vacuum tube home entertainment units with turntables and often AM-FM tuners in them. Again - non working units go cheaply.

I have purchased a few *loaded* units at the "thrift stores" for a few dollars more. If you are interested is such things you can harvest some nice wood from those and not just the electronics.

This list is all about receivers - regens in particular - but receivers are used with transmitters by some of us. Most of what applies to regens and other receivers applies to transmitters as well. It is completely reasonable to build a low power transmitter around "receiving" tubes - up to around ten watts with modest B+ voltages.

The doorbell or control transformers can be abused back to back as already described. You may also use them singly in a voltage multiplying power supply to get somewhere north of 100 volts from the 12 or 24 VAC they produce. I now prefer to follow the AC power supply with a solid state regulator (high voltage transistors) to give the plate circuits 45 to 90 volts of very clean DC. Like a series stack of 9-volt batteries on steroids. And I still use the stack of 9-volt batteries.

73,

Bill KU8H

--
"Intelligence from the internet is unreliable because we cannot verify it's accuracy nor the author's credentials."

- Julius Caesar

26447. Re: [regenrx] is it OK to use two 12 volt transformers to make 170 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-21 12:12:26 UTC
From: david.newkirk@...
Topic: 26436 Message: 26447

Rob wrote:

> when you say place....
> do you mean permanently solder into the circuit?
> Or did you mean short the capacitors with a resister to discharge it > instead of getting surprised or killed by it?
> What value resistor?

Permanently solder into the circuit, across the output terminals of the supply.

We call such a resistance a _bleeder_ because its purpose is to "bleed off the charge" of the power supply filter capacitors when you turn off the ac power to the supply.

Two 100,000-ohm, 1/2-watt resistors connected in parallel (or three 150,000-ohm, 1/2-watt resistors connected in parallel) will do it. This will give you a 50,000-ohm, 1-W resistor (with the 100k jobs) or a 50,000-ohm, 1.5-W resistor (with the trio of 150k parts). Assuming an output of 180 V (that would only be with next to no load on the supply, but we'll use that value because it's worst-case from the standpoint of power dissipation in the bleeder resistance), a 50,000-ohm resistor will dissipate 0.648 W. (Voltage squared divided by resistance.) Using a resistance that can safely dissipate 1 W or 1.5 W (or more) gives us a safety margin. (A bleeder that fails open without your knowing it is almost worst than no bleeder at all.)

A 50,000-ohm resistance with 180 V across it draws 0.0036 A (3.6 mA; voltage divided by resistance).

A high-resistance bleeder doesn't pull down the supply voltage immediately on power down, by the way; you have to wait multiple tens of seconds before the voltage comes down to a safe value. Do a run with a voltmeter connected across the supply terminals to get an idea of how far the supply voltage drops how fast. Then you can make a mental note to always wait at least that long for the bleeder to operate before working on the supply (or connected equipment) after power down. (And then use a screwdriver to short the supply terminals briefly anyway, just in case the bleeder failed open for some reason.)

Best regards,

Dave
amateur radio W9BRD

26448. re: I'd advise you to make an audio amplifier in your power supply.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-21 12:36:53 UTC
From: david.newkirk@...
Topic: 26436 Message: 26448

Rob wrote:

> I was contemplating the door bell transformer idea just to show newbies it could be done.

It's a time-honored practice. Giving it a try (a) works and (b) will remind everyone that it's an available approach. And of course "doorbell transformers" aren't the only candidates. Heating-system transformers--24 V, I think, like so-called doorbell transformers--are also fine. (Home Depot, Lowe's, your local hardware store--there you go.) So are the 6.3, 12.6, and 25.2-V "filament" transformers you can get via various suppliers (Digi-Key, Mouser) and Radio Shack stores (such as you may be able to visit).

Two transformers connected "back to back" makes an isolation transformer. The practice works just fine.

Don't be tempted to use half-wave rectification (one diode) just because it's simple or because you see a published circuit doing it. Half-wave rectification is dumb because it wastes transformer power by using only a half cycle of each ac cycle. This causes a net dc flow in the transformer secondary, which unnecessarily heats the transformer.

And BTW any computer power supply will have a high-voltage bridge rectifier that you can use, as well as two identical high-value electrolytics that will work fine for a back-to-back-120-V-transformers supply. Those caps are almost always rated at at least 200 V working; that's comfortably above the peak voltage you'll get out of rectifying 120 V (peak voltage, 1.414 times 120, or 169.7 V). Your line voltage may be higher or lower than 120, but assuming it's not higher than 125, 200-V filter Cs should be fine. Just make sure those big-value caps are discharged every time you work on the supply.

Best regards,

Dave
amateur radio W9BRD

26449. Re: [regenrx] re: I'd advise you to make an audio amplifier in your power supply.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-21 15:39:24 UTC
From: Daniel Donnelly
Topic: 26436 Message: 26449

On the subject of finding old tube type radios fo be scrapped for parts.
I have made arrangements with several Junque shops to buy all the old
radios they have. Don't find many but do find 2 or 3 a year enough to keep
me and the local in parts. I even find one every now and then that is worth
repairing and selling. not that I have made enough money to make it worth
while ... but enough to keep my interest up.
Dan.

On Sat, May 21, 2016 at 5:36 AM, david.newkirk@... [regenrx] <
regenrx@yahoogroups.com> wrote:

>
>
> Rob wrote:
>
> > I was contemplating the door bell transformer idea just to show newbies
> it could be done.
>
> It's a time-honored practice. Giving it a try (a) works and (b) will
> remind everyone that it's an available approach. And of course "doorbell
> transformers" aren't the only candidates. Heating-system transformers--24
> V, I think, like so-called doorbell transformers--are also fine. (Home
> Depot, Lowe's, your local hardware store--there you go.) So are the 6.3,
> 12.6, and 25.2-V "filament" transformers you can get via various suppliers
> (Digi-Key, Mouser) and Radio Shack stores (such as you may be able to
> visit).
>
> Two transformers connected "back to back" makes an isolation transformer.
> The practice works just fine.
>
> Don't be tempted to use half-wave rectification (one diode) just because
> it's simple or because you see a published circuit doing it. Half-wave
> rectification is dumb because it wastes transformer power by using only a
> half cycle of each ac cycle. This causes a net dc flow in the transformer
> secondary, which unnecessarily heats the transformer.
>
> And BTW any computer power supply will have a high-voltage bridge
> rectifier that you can use, as well as two identical high-value
> electrolytics that will work fine for a back-to-back-120-V-transformers
> supply. Those caps are almost always rated at at least 200 V working;
> that's comfortably above the peak voltage you'll get out of rectifying 120
> V (peak voltage, 1.414 times 120, or 169.7 V). Your line voltage may be
> higher or lower than 120, but assuming it's not higher than 125, 200-V
> filter Cs should be fine. Just make sure those big-value caps are

> discharged every time you work on the supply.
>
> Best regards,
>
> Dave
> amateur radio W9BRD
>
>
>
>

26450. re:I'd advise you to make an audio amplifier in your power supply.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-21 16:59:47 UTC
From: Rob
Topic: 26436 Message: 26450

The circuit that fueled this discussion is between "++++++++"
the power supply circuit shows just one 1N4001 diode... "half wave
rectification:"
http://www.bristolwatch.com/radio/tube_ps.gif

As per the advice......:
So for that circuit I am thinking I should replace that one diode with 4
diodes... or a bridge rectifier in this configuration
shown in this picture:
http://www.electronics-tutorials.ws/diode/diode23.gif
on this web page:
http://www.electronics-tutorials.ws/diode/diode_6.html

and also ADD the three 1/2 watt 150K ohm bleeder resistors
or two 220k, 1/2w resistors
in parallel with the smoothing capacitor
shown as C in this diode23.gif

And then finally.... add one 10 ohm fuse resistor per this advice:
==========
You could also put a 1/4w 10 ohm resistor in series with the output.
Under normal current (20 to 50 mA), the voltage and power lost in this
resistor is minimal. If a fault occurs in your radio, the resistor will
see a much higher current and burn out. That will save your rectifier
and transformer from excessive current. Consider it a cheap, low current
fuse
==========

I do have 450 volt 100uF capacitors so I don't have to scavenge power
supply parts.
Not trying to be hoity toity here.....
I would definitely scavenge hard to get expensive variable air caps from
junked radios
but I'm not real fond of scraping parts off computer power supplies.

Am am very familiar with LM7805 LM7809 LM7812 voltage regulators.
http://www.circuitdiagram.org/images/9v-power-supply-using-lm7809.GIF
I've used them a lot for transistor circuits. I have a pile of them.
I didn't think much about using sandstate regulators until I saw Leonard
Meeks circuit:
http://www.learnmorsecode.com/regenx/LM/mk21mod3c.jpg

But what solid sate voltage regulator is used for real clean B+ 90 volts?

++
12AV6 Vacuum Tube Radio shown here
http://www.bristolwatch.com/radio/index.htm

that uses a power supply built with TWO 12 volt transformers
that normally get used to step down 110 mains socket voltage to 12 volts.
++
http://www.bristolwatch.com/radio/tube_ps.gif
Pins 3 and 4 on the tube are the filament and require 12.6 volts AC or
DC. The power supply for the plate can be 150 to 170 volts. (This is a
seven pin vacuum tube.) The circuit above uses two 120 to 12.6 volt step
down transformers. By connecting the two transformers "back to back"
this serves to isolate the project from the power line to prevent
electric shock or having a "HOT" ground.
++

On 05/21/2016 08:36 AM, david.newkirk@... [regenrx] wrote:
>
> Rob wrote:
>
>
> > I was contemplating the door bell transformer idea just to show
> newbies it could be done.
>
> It's a time-honored practice. Giving it a try (a) works and (b) will
> remind everyone that it's an available approach. And of course
> "doorbell transformers" aren't the only candidates. Heating-system
> transformers--24 V, I think, like so-called doorbell transformers--are
> also fine. (Home Depot, Lowe's, your local hardware store--there you
> go.) So are the 6.3, 12.6, and 25.2-V "filament" transformers you can
> get via various suppliers (Digi-Key, Mouser) and Radio Shack stores
> (such as you may be able to visit).
>
> Two transformers connected "back to back" makes an isolation
> transformer. The practic e works just fine.
>
> Don't be tempted to use half-wave rectification (one diode) just
> because it's simple or because you see a published circuit doing it.
> Half-wave rectification is dumb because it wastes transformer power by
> using only a half cycle of each ac cycle. This causes a net dc flow in
> the transformer secondary, which unnecessarily heats the transformer.
>
> And BTW any computer power supply will have a high-voltage bridge
> rectifier that you can use, as well as two identical high-value
> electrolytics that will work fine for a
> back-to-back-120-V-transformers supply. Those caps are almost always
> rated at at least 200 V working; that's comfortably above the peak
> voltage you'll get out of rectifying 120 V (peak voltage, 1.414 times
> 120, or 169.7 V). Your line voltage may be higher or lower than 120,
> but assuming it's not higher than 125, 200-V filter Cs should be fine.
> Just make sure those big-value caps ar e discharged every time you
> work on the supply.
>
> Best regards,
>

> Dave
> amateur radio W9BRD
>

26451. re:I'd advise you to make an audio amplifier in your power supply.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-21 18:22:43 UTC
From: david.newkirk@...
Topic: 26436 Message: 26451

Yes, that full-wave-bridge coverage you've linked is exactly what you need. The 10-ohm fuse resistor is also a good idea--not only because it may save some components in the event of a long, hard short-circuit across the supply terminals, but also because if you connect a voltmeter across it you'll be able to easily calculate the current being drawn from the supply, where every 0.01 V across 10 ohms equals 1 mA of current. Don't put the fuse between the bleeder and supply, though; you don't want the bleeder to ever become disconnected, as would happen if the fuse resistor does its fuse thing.

And I forgot to mention a key operational aspect of using full-wave rectification rather than half-wave: Full-wave rectification results in ripple that's easier to filter. With full-wave rectification, the ripple occurs at 120 Hz (two pulses per cycle of the line waveform), whereas with half-wave rectification the ripple occurs at 60 Hz (one pulse per cycle). Whatever filtering you do will therefore get rid of more 120-Hz ripple than 60-Hz ripple with the same filtering parts in place.

BTW, when you rescue the bridge rectifier from a computer power supply, you can probably find out its ratings (current and voltage) by Googling its cryptic part number in conjunction with the word _rectifier_. Likewise for the non-1N-series markings on rescue rectifier diodes.

Best regards,

Dave
amateur radio W9BRD

26452. is it OK to use NIXIE tube power supplies for B+

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-21 18:22:43 UTC
From: Rob
Topic: 26452 Message: 26452

On the web I came across a lot of NIXIE tube power supplies that are DC
to DC converters that will
take 12 volts and make up to 200 volts DC.

These circuits are based on 555 timers chips and MC34063 and MAX1771.

The attraction to these curiosities is merely the cost.....

Nixie High Voltage Power Supply Kit 40V - 200V
http://www.ebay.com/itm/131741604802 $12

and

Nixie Power supply, High Voltage Switch Mode DC-DC Converter Kit,
95-190VDC, 25ma @ 180VDC
Model # HV-SMPS $19.99

which looks too good to be true......
so I ask
is it OK to use these NIXIE tube power supplies for B+
in a 6AK5
circuit like this:
http://www.learnmorsecode.com/regenx/LM/Mk21Mod3d.jpg

I'm a bit of a purist.... rolling my own capacitors and winding
KANTHAL wire for filament rheostats.....
http://www.learnmorsecode.com/regen/rheostat24AWGKANTHAL.jpg
http://www.learnmorsecode.com/regen/resistance.jpg
http://www.learnmorsecode.com/help/type30/index.html

but I always look for how the modern world components can be used in
case it MUST be done cheaper
for fellow radio experimenters.

I always thought that power supply circuits introduce unnecessary ...
unwanted .....screaming RF.
I could walk through a computer room...yea I said room.... and could
wave my SONY WALKMAN headphone wire
close to mainframe computers and pick out where the power supply was
inside the BIG BLUE cabinets.

So what happens with these NIXIE power supplies?
Are they any use to us to experiment with tube regenerative receivers
that will hear radio transmission from anywhere on the planet?

26453. RE: [regenrx] re: I'd advise you to make an audio amplifier in your power supply.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-21 18:20:43 UTC
From: Jedwardsat1
Topic: 26436 Message: 26453

So if you are using a single 100uF capacitor, the ripple voltage will be something like 4.2v peak to peak. It will be less at lower currents.

I'd recommend using a filter to get the ripple to less than 0.1vpp. The absolute value isn't always critical but it needs to be much smaller than the strength of the input signal. A radio receiver is going to need a very clean DC supply and that can be done easily.

On the power supply, I recommend a 100uF capacitor, a 150 ohm resistor, and another 100uF capacitor. The resistor only burns about 6v and you get a ripple less than 0.5vpp. In your receiver, on a separate chassis, you can place another filter for more reduction. The regenerative detector should draw no more than 5 mA or so.

The power amplifier plate will see, at full power, something like 200vpp, meaning that a volt or two of ripple is not going to be noticeable. Just keep that ripple put of the earlier stages.

Also, some people make a choke out of the 120v primary of a spare transformer. It sort of works. Using a choke instead of a resistor greatly reduces ripple and therefore hum.

Ed AE7TE

Sentchokem my Samsung Smart Phone

-------- Original message --------
Subject: [regenrx] re: I'd advise you to make an audio amplifier in your power supply.
From: "david.newkirk@gmail.com [regenrx]" <regenrx@yahoogroups.com>
To: regenrx@yahoogroups.com
CC:

Rob wrote:

> I was contemplating the door bell transformer idea just to show newbies it could be done.

It's a time-honored practice. Giving it a try (a) works and (b) will remind everyone that it's an available approach. And of course "doorbell transformers" aren't the only candidates. Heating-system transformers--24 V, I think, like so-called doorbell transformers--are also fine. (Home Depot, Lowe's, your local hardware store--there you go.) So are the 6.3, 12.6, and 25.2-V "filament" transformers you can get via various suppliers (Digi-Key, Mouser) and Radio Shack stores (such as you may be able to visit).

Two transformers connected "back to back" makes an isolation transformer. The practice works just fine.

Don't be tempted to use half-wave rectification (one diode) just because it's simple or because you see a published circuit doing it. Half-wave rectification is dumb because it

wastes transformer power by using only a half cycle of each ac cycle. This causes a net dc flow in the transformer secondary, which unnecessarily heats the transformer.

And BTW any computer power supply will have a high-voltage bridge rectifier that you can use, as well as two identical high-value electrolytics that will work fine for a back-to-back-120-V-transformers supply. Those caps are almost always rated at at least 200 V working; that's comfortably above the peak voltage you'll get out of rectifying 120 V (peak voltage, 1.414 times 120, or 169.7 V). Your line voltage may be higher or lower than 120, but assuming it's not higher than 125, 200-V filter Cs should be fine. Just make sure those big-value caps are discharged every time you work on the supply.

Best regards,

Dave
amateur radio W9BRD

26454. Re: [regenrx] re: I'd advise you to make an audio amplifier in your power supply.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-21 19:47:36 UTC
From: Rob
Topic: 26436 Message: 26454

replace the PERIODS "." with blank space below

```
------+-----\/\/\/\/\/\/\-----+-----------.DC plus out
........|.........................|
......<>.....................<>
........|.........................|
------G--------------------G-----------.DC minus
```

Did I get this right....
<> is 100uF capacitors
/\/\/\/\ is the 150K resistor
G is ground

I have some RF chokes.... various sizes....2.5uH ..... 9uH 27uH
what value should this be to replace the resistor?

On 05/21/2016 02:20 PM, Jedwardsat1 jedwardsat1@... [regenrx] wrote:
>
> So if you are using a single 100uF capacitor, the ripple voltage will
> be something like 4.2v peak to peak. It will be less at lower currents.
>
>
> I'd recommend using a filter to get the ripple to less than 0.1vpp.
> The absolute value isn't always critical but it needs to be much
> smaller than the strength of the input signal. A radio receiver is
> going to need a very clean DC supply and that can be done easily.
>
> On the power supply, I recommend a 100uF capacitor, a 150 ohm
> resistor, and another 100uF capacitor. The resistor only burns about
> 6v and you get a ripple less than 0.5vpp. In your receiver, on a
> separate chassis, you can place another filter for more reduction. The
> regenerative detector should draw no more than 5 mA or so.
>
> The power amplifier plate will see, at full power, something like
> 200vpp, meaning that a volt or two of ripple is not going to be
> noticeable. Just keep that ripple put of the ear lier stages.
>
> Also, some people make a choke out of the 120v primary of a spare
> transformer. It sort of works. Using a choke instead of a resistor
> greatly reduces ripple and therefore hum.
>
> Ed AE7TE
>
>
> Sentchokem my Samsung Smart Phone

>
>
>
> -------- Original message --------
> Subject: [regenrx] re: I'd advise you to make an audio amplifier in
> your power supply.
> From: "david.newkirk@... [regenrx]" <regenrx@yahoogroups.com>
> To: regenrx@yahoogroups.com
> CC:
>
>
> Rob wrote:
>
>
> > I was contemplating the door bell transformer idea just to show
> newbies it could be done.
>
> It's a time-honored practice. Giving it a try (a) works and (b) will
> remind everyone that it's an available approach. And of course
> "doorbell transformers" aren't the only candidates. Heating-system
> transformers--24 V, I think, like so-called doorbell transformers--are
> also fine. (Home Depot, Lowe's, your local hardware store--there you
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> get via various suppliers (Digi-Key, Mouser) and Radio Shack stores
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>
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> Half-wave rectification is dumb because it wastes transformer power by
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> the transformer secondary, which unnecessarily heats the transformer.
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> back-to-back-120-V-transformers supply. Those caps are almost always
> rated at at least 200 V working; that's comfortably above the peak
> voltage you'll get out of rectifying 120 V (peak voltage, 1.414 times
> 120, or 169.7 V). Your line voltage may be higher or lower than 120,
> but assuming it's not higher than 125, 200-V filter Cs should be fine.
> Just make sure those big-value caps are discharged every time you work
> on the supply.
>
> Best regards,
>
> Dave
> amateur radio W9BRD

>

26455. Re: [regenrx] re: I'd advise you to make an audio amplifier in your power supply.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-21 21:11:45 UTC
From: david.newkirk@...
Topic: 26436 Message: 26455

Rob wrote:

> I have some RF chokes.... various sizes....2.5uH ..... 9uH 27uH
> what value should this be to replace the resistor?

RF chokes are useless for reducing ripple in a power supply. You need an inductance on the order of henries, commonly a value between 5 and 30 H (with higher values needed for lower current). RF chokes are millionths or thousandths of henries. The resistor method is fine. 470-ohm, 10-W wirewound power resistors are fine.

Yes, your ASCII-art drawing is correct.

Power transformers don't want to see dc in their windings (it causes their cores to _saturate_), so don't use one to approximate a power-supply choke. Use the secondary (higher-impedance winding) of an audio output transformer instead if you must substitute.

But resistors and high-value capacitors can do a good enough job of filtering without your having to resort to chokes, and nowadays we can pour on hundreds of microfarads of electrolytic filter capacitance at relatively low cost, saving on the cost of chokes (a lot of iron wrapped up in some copper). If you're going to use anything other than an audio-output-transformer winding (as an experiment; at least _they_ expect to see dc in their primarie windings), get an actual filter choke. The exact value needed (to make a difference in ripple reduction) "depends"; go read one of the ham handbooks about power supplies. (PDFs available from tubebooks.org; use a handbook from the 1950s or later.

As far as audio output stages go, assuming that you use a beam power tube (6V6/12V6, 12A6) or power pentode (6K6, 6AK6), a cool fact about such tubes lets you ease up on filtering requirements somewhat. The plate current of a pentode or beam tube depends more on its _screen_ voltage that its plate voltage. This means that you can tolerate more ripple on the _plate_ supply to an AF power tube than on its _screen_ supply. Screens take relatively little current compared to the plate, so you can extend your filter one section more just for the power-amp screen (and maybe another highly-hum-sensitive stage) and power the power-amp screen from the extra-filtered supply.

Best regards,

Dave
amateur radio W9BRD

26456. Re: is it OK to use NIXIE tube power supplies for B+

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-21 21:20:02 UTC
From: david.newkirk@...
Topic: 26452 Message: 26456

Rob wrote:

> So what happens with these NIXIE power supplies?
> Are they any use to us to experiment with tube regenerative receivers
> that will hear radio transmission from anywhere on the planet?

Your Walkman like heard power supplies inside computer cabinets by means of induction. (You may alos have heard noise near the supplies merely because that's where the noisy ac line came in.) That mechanism won't operate much with a dc-to-dc-converter supply. What will matter more is how clean the output line is in terms of noise and RF junk. (Dc-to-dc converters include an oscillator that can generate harmonics.)

The best way to find out if one of these supplies will work is to get one and try it. So many factors are in play as to whether or not such a supply compromises radio reception that generic/general statements are unlikely to be useful.

Best regards,

Dave
amateur radio W9BRD

26457. Re: [regenrx] re: I'd advise you to make an audio amplifier in your power supply.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-21 22:36:40 UTC
From: J Ed
Topic: 26436 Message: 26457

He's proposing a 150k resistor as the series element. Use a 150 ohm resistor (470 ohms is fine if you can tolerate the extra voltage loss) for the series element between the two capacitors. The 150 will burn 7.5v and 0.375w. A 1/2w resistor will get hot here and a 1w resistor will get less hot.

A 470 ohm resistor will burn around 24v at 50 mA, which is a little over a watt. Use a 3w resistor. The ripple output using a 150r is around 350 mvpp and it's around 115 mvpp with the 470r. You can do either one and you'll see low ripple either way.

If you used a 1.5H choke, the output ripple would be lower than 50 mvpp. The advantage is that you don't lose as much DC voltage as when you use a resistor. Either one will work well for you and you'll remember that the same filter will show lower ripple voltage when you are using less current from the supply.

As a rule of thumb, use a resistor that is more than twice the power of what you calculate. Remember that it will still put off heat but will get less hot itself.

One more thing. If you use a regulator tube, you can get a steady 105ish volts for your receiver and use the 170v output for the audio amplifier. I'll draw you a diagram.

Ed AE7TE

Rob wrote:

> I have some RF chokes.... various sizes....2.5uH ..... 9uH 27uH
> what value should this be to replace the resistor?

RF chokes are useless for reducing ripple in a power supply. You need an inductance on the order of henries, commonly a value between 5 and 30 H (with higher values needed for lower current). RF chokes are millionths or thousandths of henries. The resistor method is fine. 470-ohm, 10-W wirewound power resistors are fine.

Yes, your ASCII-art drawing is correct.

Power transformers don't want to see dc in their windings (it causes their cores to _saturate_), so don't use one to approximate a power-supply choke. Use the secondary (higher-impedance winding) of an audio output transformer instead if you must substitute.

But resistors and high-value capacitors can do a good enough job of filtering without your having to resort to chokes, and nowadays we can pour on hundreds of microfarads of electrolytic filter capacitance at relatively low cost, saving on the cost of chokes (a lot of iron wrapped up in some copper). If you're going to use anything other than an audio-output-transformer winding (as an experiment; at least _they_ expect to see dc in their primarie windings), get an actual filter choke. The exact value needed (to make a difference in ripple reduction) "depends"; go read one of the ham handbooks about power supplies. (PDFs available from tubebooks.org; use a handbook from the 1950s or later.

As far as audio output stages go, assuming that you use a beam power tube (6V6/12V6, 12A6) or power pentode (6K6, 6AK6), a cool fact about such tubes lets you ease up on filtering requirements somewhat. The plate current of a pentode or beam tube depends more on its _screen_ voltage that its plate voltage. This means that you can tolerate more ripple on the _plate_ supply to an AF power tube than on its _screen_ supply. Screens take relatively little current compared to the plate, so you can extend your filter one section more just for the power-amp screen (and maybe another highly-hum-sensitive stage) and power the power-amp screen from the extra-filtered supply.

Best regards,

Dave
amateur radio W9BRD

26458. Re: [regenrx] re: I'd advise you to make an audio amplifier in your power supply.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-21 23:03:50 UTC
From: J Ed
Topic: 26436 Message: 26458
Attachments: 1 described; binary payloads are missing from this source WARC

Here is a diagram of what I mean. It isn't the only way to do what you're trying to do.

Ed AE7TE

On Sat, May 21, 2016 at 3:36 PM, J Ed <jedwardsat1@gmail.com> wrote:

> He's proposing a 150k resistor as the series element. Use a 150 ohm
> resistor (470 ohms is fine if you can tolerate the extra voltage loss) for
> the series element between the two capacitors. The 150 will burn 7.5v and
> 0.375w. A 1/2w resistor will get hot here and a 1w resistor will get less
> hot.
>
> A 470 ohm resistor will burn around 24v at 50 mA, which is a little over a
> watt. Use a 3w resistor. The ripple output using a 150r is around 350 mvpp
> and it's around 115 mvpp with the 470r. You can do either one and you'll
> see low ripple either way.
>
> If you used a 1.5H choke, the output ripple would be lower than 50 mvpp.
> The advantage is that you don't lose as much DC voltage as when you use a
> resistor. Either one will work well for you and you'll remember that the
> same filter will show lower ripple voltage when you are using less current
> from the supply.
>
> As a rule of thumb, use a resistor that is more than twice the power of
> what you calculate. Remember that it will still put off heat but will get
> less hot itself.
>
> One more thing. If you use a regulator tube, you can get a steady 105ish
> volts for your receiver and use the 170v output for the audio amplifier.
> I'll draw you a diagram.
>
> Ed AE7TE
>
>
> Rob wrote:
>
> > I have some RF chokes.... various sizes....2.5uH ..... 9uH 27uH
> > what value should this be to replace the resistor?
>
> RF chokes are useless for reducing ripple in a power supply. You need an
> inductance on the order of henries, commonly a value between 5 and 30 H
> (with higher values needed for lower current). RF chokes are millionths or

> thousandths of henries. The resistor method is fine. 470-ohm, 10-W
> wirewound power resistors are fine.
>
> Yes, your ASCII-art drawing is correct.
>
> Power transformers don't want to see dc in their windings (it causes their
> cores to _saturate_), so don't use one to approximate a power-supply choke.
> Use the secondary (higher-impedance winding) of an audio output transformer
> instead if you must substitute.
>
> But resistors and high-value capacitors can do a good enough job of
> filtering without your having to resort to chokes, and nowadays we can pour
> on hundreds of microfarads of electrolytic filter capacitance at relatively
> low cost, saving on the cost of chokes (a lot of iron wrapped up in some
> copper). If you're going to use anything other than an
> audio-output-transformer winding (as an experiment; at least _they_ expect
> to see dc in their primarie windings), get an actual filter choke. The
> exact value needed (to make a difference in ripple reduction) "depends"; go
> read one of the ham handbooks about power supplies. (PDFs available from
> tubebooks.org; use a handbook from the 1950s or later.
>
> As far as audio output stages go, assuming that you use a beam power tube
> (6V6/12V6, 12A6) or power pentode (6K6, 6AK6), a cool fact about such tubes
> lets you ease up on filtering requirements somewhat. The plate current of a
> pentode or beam tube depends more on its _screen_ voltage that its plate
> voltage. This means that you can tolerate more ripple on the _plate_ supply
> to an AF power tube than on its _screen_ supply. Screens take relatively
> little current compared to the plate, so you can extend your filter one
> section more just for the power-amp screen (and maybe another
> highly-hum-sensitive stage) and power the power-amp screen from the
> extra-filtered supply.
>
> Best regards,
>
> Dave
> amateur radio W9BRD
>
>
>
>

26459. Re: [regenrx] re: I'd advise you to make an audio amplifier in your power supply.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-22 00:49:23 UTC
From: david.newkirk@...
Topic: 26436 Message: 26459

Ed wrote:

> If you used a 1.5H choke, the output ripple would be lower than 50 mvpp. The advantage
> is that you don't lose as much DC voltage as when you use a resistor. Either one will work well
> for you and you'll remember that the same filter will show lower ripple voltage when
> you are using less current from the supply.

Yes, chokes are better. I think he'd need more than 1.5 H, though, as what's missing from this discussion is the concept of _critical inductance_, input-choke values lower than which will, at low current demand, allow the supply output to soar as if it's a capacitor-input filter. (That's why a constant minimum load like a VR tube is a good thing in addition to the VR tube provided a constant-V output. Whatever constant draw the VR tube contributes helps bring the min input-choke inductance value down.)

The formula for critical inductance is Lcrit = Output V divided by min current drain in mA. If this were a 150-V supply, for instance, a choke as low as 1.5 H would need a min current drain of 100 mA to keep the choke in full play. Still assuming 150 V, a bleeder current of 3 mA (50 k bleeder) and a VR-tube max current of 20 mA would set a min current drain of 23 mA, making Lcrt 150 / 23, or 6.5 H.

In the days of no transistors and thermionic/gas-vapor rectifiers, heavy bleeder currents were commonly used to keep chokes choking. So were _swinging chokes_--chokes manufactured to emphasize the normal choke tendency for inductance to decrease as current through the choke increases. [The first choke in the line was the swinging choke; the next and subsequent chokes were _smoothing_ chokes.] All chokes swing somewhat, so whatever choke you buy will have its inductance specified at a given current but will exhibit some inductance increase as the current through it decreases.)

Hammand (via tubesandmore.com) has a 15 H, 75 mA job (411 ohms) and a 9 H, 40 mA job (300 ohms). Either would work in this application, I think--and BTW I recommend the 12A6, 7701 or 5686 as equivalently good AF power output tubes for this application. All of these will draw only 20 to 30 mA max at 150ish volts. My utility AF amplifier/filter box (http://dpnwritings.nfshost.com/ej/pictures/pictures0.htm http://dpnwritings.nfshost.com/ej/pictures/pictures0.htm) uses a 12A6 or 7701 day in and day out and provides excellent service at 150 V or so. An output transformer that provides a 7-kilohm load is just right for all the tubes mentioned.

Best regards,

Dave
amateur radio W9BRD

26460. Re: [regenrx] re: I'd advise you to make an audio amplifier in your power supply.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-22 02:09:39 UTC
From: J Ed
Topic: 26436 Message: 26460

> Yes, chokes are better. I think he'd need more than 1.5 H, though, as what's missing from this discussion is the concept of _critical inductance_, input-choke values lower than which will, at low current demand, allow the supply output to soar as if it's a capacitor-input filter. (That's why a constant minimum load like a VR tube is a good thing in addition to the VR tube provided a constant-V output. Whatever constant draw the VR tube contributes helps bring the min input-choke inductance value down.)

That's assuming he wants to make a choke input filter. The capacitive input filter I outlined in my drawings uses the choke as a smoothing filter. I calculated a very low ripple with a 1.5H choke. That's also at 50 mA, which is a sizeable load current for a low power amplifier and a simple receiver. If he is just running a one-tube receiver and nothing else off of the power supply, the ripple will be ridiculously low.

> The formula for critical inductance is Lcrit = Output V divided by min current drain in mA. If this were a 150-V supply, for instance, a choke as low as 1.5 H would need a min current drain of 100 mA to keep the choke in full play. Still assuming 150 V, a bleeder current of 3 mA (50 k bleeder) and a VR-tube max current of 20 mA would set a min current drain of 23 mA, making Lcrt 150 / 23, or 6.5 H.

Yes. The objective is to make the choke equal to or higher than the effective load resistance. That's all well and good, and makes the current waveform from the transformer closer to a sine wave. That means you can reap more current from the transformer. Still, using the 1.5H inductor as a pi filter instead of an input choke is still effective at reducing ripple.

> In the days of no transistors and thermionic/gas-vapor rectifiers, heavy bleeder currents were commonly used to keep chokes choking. So were _swinging chokes_--chokes manufactured to emphasize the normal choke tendency for inductance to decrease as current through the choke increases. [The first choke in the line was the swinging choke; the next and subsequent chokes were _smoothing_ chokes.] All chokes swing somewhat, so whatever choke you buy will have its inductance specified at a given current but will exhibit some inductance increase as the current through it decreases.)

Indeed. I'm not going to suggest that we use a lot of bleeder current because that's effectively wasted until the power switch is opened. If he built a supply that were capacitor input, followed up by two LC smoothing filter stages, there would be so much ripple reduction that it might take a sensitive direct conversion receiver to detect it.

> Hammand (via tubesandmore.com) has a 15 H, 75 mA job (411 ohms) and a 9 H, 40 mA job (300 ohms). Either would work in this application, I think--and BTW I recommend the 12A6, 7701 or 5686 as equivalently good AF power output tubes for this application. All of these will

draw only 20 to 30 mA max at 150ish volts. My utility AF amplifier/filter box (http://dpnwritings.nfshost.com/ej/pictures/pictures0.htm) uses a 12A6 or 7701 day in and day out and provides excellent service at 150 V or so. An output transformer that provides a 7-kilohm load is just right for all the tubes mentioned.

Yes. Before the advent of 12v-plate tubes, there were many tubes made with 12v heaters designed to be run by 200-ish volts from a vibrator supply. There are very many power pentodes or beam power tubes capable of a watt or two. I'd suggest that as the starting point for the amplifier.

I'm going through a similar issue right now. I have a 220-110v power transformer I got in Bahrain that is 300w of iron and copper. I calculated a maximum DC current of 500mA which is more than almost any amplifier would need (unless I had an output stage of eight 6L6s in push-pull). Finding a hefty choke capable of that kind of current is tough. One of my mentors has sent me a 10H, 375 mA choke which I'm going to use. I intend to make a CLC filter for the power supply, using a 470 uF cap as the input capacitor. It's possible I'll get another cap that large for the other spot in the filter.The whole thing will power a transmitter and receiver. For a starter transmitter, I'm thinking 6C4s in parallel or push pull or something.

Ed AE7TE

26461. Re: [regenrx] Re: is it OK to use NIXIE tube power supplies for B+

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-22 03:30:38 UTC
From: Rob
Topic: 26452 Message: 26461

I ordered one to play with.
We'll see what happens.

On 05/21/2016 05:20 PM, david.newkirk@... [regenrx] wrote:
>
> Rob wrote:
>
>
> > So what happens with these NIXIE power supplies?
> >Are they any use to us to experiment with tube regenerative receivers
> >that will hear radio transmission from anywhere on the planet?
>
> Your Walkman like heard power supplies inside computer cabinets by
> means of induction. (You may alos have heard noise near the supplies
> merely because that's where the noisy ac line came in.) That mechanism
> won't operate much with a dc-to-dc-con verter supply. What will matter
> more is how clean the output line is in terms of noise and RF junk.
> (Dc-to-dc converters include an oscillator that can generate harmonics.)
>
> The best way to find out if one of these supplies will work is to get
> one and try it. So many factors are in play as to whether or not such
> a supply compromises radio reception that generic/general statements
> are unlikely to be useful.
>
> Best regards,
>
> Dave
> amateur radio W9BRD
>

26462. Re: [regenrx] re: I'd advise you to make an audio amplifier in your power supply.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-22 03:46:03 UTC
From: Rob
Topic: 26436 Message: 26462

Dang.... I just purchased two of the 2H chokes per the drawing
instruction of of "2H or more".

The prices on the 15H chokes are back out there in the $30 range.....
while TWO of the 2H chokes can be purchased for $30.

I always try to buy at least two components.... one for home and one
for radio club show and tell
and ELMER experimentation.

I must thank both of you guys for all these details and food for thought.
The idea of doing the audio amp plus power supply AND also the OC3 tube
to power the regen experiments
is just brilliant. I really like this idea.
I can see how investing the money into the right transformer and the
right choke once will pay off
in the long run of future experimentation.

Its not that I MUST rebuild something antique per original
specifications......
I just wanted to get off the 9 volt battery pile.
So I'm game for anything here... maybe even the $12 NIXIE tube power
supply if it isn't noisy.

On 05/21/2016 10:09 PM, J Ed jedwardsat1@... [regenrx] wrote:
>
> > Yes, chokes are better. I think he'd need more than 1.5 H, though,
> as what's missing from this discussion is the concept of _critical
> inductance_, input-choke values lower than which will, at low current
> demand, allow the supply output to soar as if it's a capacitor-input
> filter. (That's why a constant minimum load like a VR tube is a good
> thing in addition to the VR tube provided a constant-V output.
> Whatever constant draw the VR tube contributes helps bring the min
> input-choke inductance value down.)
>
> That's assuming he wants to make a choke input filter. The capacitive
> input filter I outlined in my drawings uses the choke as a smoothing
> filter. I calculated a very low ripple with a 1.5H choke. That's also
> at 50 mA, which is a sizeable load current for a low power amplifier
> and a simple receiver. If he is just running a one-tube receiver and
> nothing else off of the power supply, the ripple will be ridiculously
> low.
>
> > The formula for critical inductance is Lcrit = Output V divided by
> min current drain in mA. If this were a 150-V supply, for instance, a

> choke as low as 1.5 H would need a min current drain of 100 mA to keep
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> because that's effectively wasted until the power switch is opened. If
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> with 12v heaters designed to be run by 200-ish volts from a vibrator
> supply. There are very many power pentodes or beam power tubes capable
> of a watt or two. I'd suggest that as the starting point for the
> amplifier.
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> transformer I got in Bahrain that is 300w of iron and copper. I
> calculated a maximum DC current of 500mA which is more than almost any
> amplifier would need (unless I had an output stage of eight 6L6s in
> push-pull). Finding a hefty choke capable of that kind of current is
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> going to use. I intend to make a CLC filter for the power supply,
> using a 470 uF cap as the input capacitor. It's possible I'll get
> another cap that large for the other spot in the filter.The whole
> thing will power a transmitter and receiver. For a starter
> transmitter, I'm thinking 6C4s in parallel or push pull or something.
>
> Ed AE7TE
>
>

26463. Re: [regenrx] Re: is it OK to use NIXIE tube power supplies for B+

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-22 04:13:42 UTC
From: J Ed
Topic: 26452 Message: 26463

That's bad ass. I have been trying to build one using an MC36043 switching controller.

Ed AE7TE
On May 21, 2016 8:30 PM, "Rob roomberg@... [regenrx]" <
regenrx@yahoogroups.com> wrote:

>
>
> I ordered one to play with.
> We'll see what happens.
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> On 05/21/2016 05:20 PM, david.newkirk@gmail.com [regenrx] wrote:
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> how clean the output line is in terms of noise and RF junk. (Dc-to-dc
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> and try it. So many factors are in play as to whether or not such a supply
> compromises radio reception that generic/general statements are unlikely to
> be useful.
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> Best regards,
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> Dave
> amateur radio W9BRD
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26464. Re: [regenrx] re: I'd advise you to make an audio amplifier in your power supply.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-22 07:04:51 UTC
From: J Ed
Topic: 26436 Message: 26464

You're on the right track. If you have an extra capacitor, make a CLCLC filter with the two chokes, that will reduce hum so much it will be hard to measure.

The regen will benefit from a stabilized supply voltage in that its frequency stability will improve as a result of regulation. Most VFOs I have seen use a zener diode for the same reason.

Ed AE7TE
On May 21, 2016 8:46 PM, "Rob roomberg@... [regenrx]" <
regenrx@yahoogroups.com> wrote:

>
>
> Dang.... I just purchased two of the 2H chokes per the drawing instruction
> of of "2H or more".
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> The prices on the 15H chokes are back out there in the $30 range.....
> while TWO of the 2H chokes can be purchased for $30.
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> and ELMER experimentation.
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>
> I must thank both of you guys for all these details and food for thought.
> The idea of doing the audio amp plus power supply AND also the OC3 tube to
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> is just brilliant. I really like this idea.
> I can see how investing the money into the right transformer and the right
> choke once will pay off
> in the long run of future experimentation.
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> Its not that I MUST rebuild something antique per original
> specifications......
> I just wanted to get off the 9 volt battery pile.
> So I'm game for anything here... maybe even the $12 NIXIE tube power
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>
> Ed AE7TE
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>
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>

26465. Re: [regenrx] re: I'd advise you to make an audio amplifier in your power supply.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-22 11:37:38 UTC
From: david.newkirk@...
Topic: 26436 Message: 26465

Ed wrote:

> I calculated a very low ripple with a 1.5H choke. That's also
> at 50 mA, which is a sizeable load current for a low power amplifier
> and a simple receiver. If he is just running a one-tube receiver and
> nothing else off of the power supply, the ripple will be ridiculously
> low.

That's true. There's smoothing/filtering and then there's supply voltage regulation. Especially if the receiver isn't a many-tube superhet with AGC, the power supply load won't vary much at all during operation. Even just a few henries, especially in conjunction with the multi-hundred-uF caps available cheaply today, will still provide very useful ripple reduction.

To keep us all on these same page: All an inter-filter-C resistor does to help filtering is slow discharge of the capacitor[s] ahead of it. But using a choke--an inductor--instead does that and more. The "more" is that the choke stores energy in its magnetic field. Every time current through the choke starts to decrease, its magnetic field collapses a little, "trying" to maintain the current flow through the choke; likewise, every time current through the choke starts to increase, some of that increase goes into strengthening the magnetic field around the choke and slowing the buildup of current through the choke. In effect, the choke smooths ripple _by resisting changes in the current flow through it_.

A filter capacitor reduces ripple by storing energy in an _electric_ field, and sourcing energy from that field when the voltage across its terminals starts to drop (such as between charging pulses from the rectifiers that charge it). So building a power-supply filter with parallel capacitors (supply line to ground) and series inductors (in series with the supply line) irons out ripple "coming and going." The capacitors prop up the supply voltage when voltage starts to sag; the inductors prop up supply _current_ when _current_ starts to sag. Ripple (ac superimposed on the supply's dc output) is just a small cyclical sag that we want to iron out.

And BTW if we want to think of a power-supply filter as a big low-pass filter, that works, too! Ripple is just a frequency compoment we want not to show up superimposed on the supply's big dc output signal.

> Yes. Before the advent of 12v-plate tubes, there were many tubes made
> with 12v heaters designed to be run by 200-ish volts from a vibrator
> supply.

We see a slew of these coming out in the 1950s, when cars were switching from 6.3 to 12.6 V electrical systems. The 12BK5 comes to mind; but note that for cars, low heater drain was not as important, so some of the automotive power tubes take a _lot_ of heater current at 12.6 V (0.6 A for the 12BK5). Another candidate that's cheap on Ebay is the 8106; it was an RF driver for the GE Progress Line transceivers, but will work well as an AF power tube.

(Use a 100- or 1000-ohm stopper resistor between its screen and the outside world, though; the thing has transconductance of 9 mS!) The reason I like the 12A6, 7701, and 5686 is that they were intended for _aircraft_ use and so embody heater-power economy as well as lower-power plates. Every "ARC-5"/"Command" receiver had a 12A6 AF power stage.

And BTW although they're fun to play with, those "12 V plate" tubes were pretty crummy performers compared to their higher-voltage counterparts. I just added this passage to a "Ministry of Silly Tubes" page I'm working on for my site:

Wrote Vern Chambers, W1JEQ, in his "Something New in High-Frequency Mobile Converters," QST, 1956, pages 16–21:
As might so very well be expected, there is one small fly in the ointment as far as the new tubes are concerned. They do overload at signal levels considerably below that handled with ease by conventional high-voltage tubes. However, in actual practice, we have run across only one or two ham-band signals that caused the converter to "fold up." All other cases of overload have been effectively treated merely by detuning the input circuit.
And BTW, the usage "silly tubes" is just for the fun of invoking Monty Python. What the page is about (draft in beginning stages at http://dpnwritings.nfshost.com/ej/silly_tubes/ http://dpnwritings.nfshost.com/ej/silly_tubes/) is that if we're willing to get off the beaten path and not just try to build yesterday's circuits again and again with exactly the same tubes and practices as "yesterday" involved, a large array of very fun tube candidates await. Of _course_ I've got meself a clutch of those 12-V-plate/screen tubes to play with, for instance; but I also have a series of experiments planned to build a Regenerodyne that tries 3DT6 v 3BY6 v 3BE6 converter ahead of a 9GV8 detector/AF-amplifier combo (with the _power pentode_ as detector). Two sleeves of Amperex 4ES8 dual triodes for ten bucks--remote-cutoff cascodes, here I come!--were hard to pass up. There's a wide world beyond 6AG7s, 6L6s and 807/1625s, and especially if we're willing to use tubes with odd heater voltages, we pretty much have a lifetime supply waiting for us at hamfests and Ebay.

> For a starter transmitter, I'm thinking 6C4s in parallel or push pull or something.

A triode the audio, er, enthusiasts so far haven't price-bombed is the 6S4, A pair of those in push-pull should make a peachy low-power final much herkier than one based on 6C4s. They're low-mu like the old days, but high-transconductance like the new days.

Best regards,

Dave
amateur radio W9BRD

26466. Re: [regenrx] re: I'd advise you to make an audio amplifier in your power supply.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-22 11:52:10 UTC
From: david.newkirk@...
Topic: 26436 Message: 26466

Rob wrote:

> Dang.... I just purchased two of the 2H chokes per the drawing instruction of of "2H or more".
>
> The prices on the 15H chokes are back out there in the $30 range.....
> while TWO of the 2H chokes can be purchased for $30.

No problem! As Ed wrote, 2 H can still contribute very useful ripple reduction in your power supply. The "critical inductance" aspect I discussed is more about supply output-voltage regulation--an issue that doesn't matter much for receivers, especially simple receivers. Getting an 0C3 or 0B2 (equivalent VR tubes, the first octal and the second, 7-pin mini) to peg the voltage feed to your detector will make your detector noticeably less botherable by line-voltage shifts, such as when big electric appliances in the house cycle and switch. Even just one of your 2-H chokes will, in place of an inter-C resistor (a) give less voltage drop and (b) give better ripple reduction.

And BTW, "for a good time," try this: If you have a receiver with a triode AF voltage amplifier or (even better) a pentode AF voltage amplifier, temporarily remove its plate resistor (usually something between 47 k and 150 k) and connect one of your 2-H chokes in in its place. Then solder two 0.01-uF capacitors in parallel across the choke. This makes an audio tuned circuit (0.02 uF across 2 H) that will resonate in the vicinity of 800 Hz. See what tuning around for ham Morse-code transmissions sounds like with a distinct 800-Hz peak in your audio. The choke will pick up some hum, and the overall gain will probably be less than with the resistor you removed, but this gives you a glimpse of the possibilities of "tuned audio" with a regen.

Best regards,

Dave
amateur radio W9BRD

26467. Re: [regenrx] Re: is it OK to use NIXIE tube power supplies for B+

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-22 14:50:51 UTC
From: msalbert@...
Topic: 26452 Message: 26467

I don't know about the module under discussion, but one I bought had wrong type filter capacitors in it. Plain old lyrics , rather than a low ESR parts. It got quite hot in operation. Replacing it with a film capacitor helped a lot. So, you might look out for that. Regards, Mark KB9VKE -----Original Message----- From: J Ed jedwardsat1@... [regenrx] To: regenrx Sent: Sat, May 21, 2016 11:13 PM Subject: Re: [regenrx] Re: is it OK to use NIXIE tube power supplies for B+

That's bad ass. I have been trying to build one using an MC36043 switching controller.

Ed AE7TE

On May 21, 2016 8:30 PM, "Rob roomberg@... [regenrx]" <regenrx@yahoogroups.com> wrote:

I ordered one to play with. We'll see what happens.
On 05/21/2016 05:20 PM, david.newkirk@gmail.com [regenrx] wrote:

Rob wrote:

> So what happens with these NIXIE power supplies? > Are they any use to us to experiment with tube regenerative receivers > that will hear radio transmission from anywhere on the planet? Your Walkman like heard power supplies inside computer cabinets by means of induction. (You may alos have heard noise near the supplies merely because that's where the noisy ac line came in.) That mechanism won't operate much with a dc-to-dc-con verter supply. What will matter more is how clean the output line is in terms of noise and RF junk. (Dc-to-dc converters include an oscillator that can generate harmonics.) The best way to find out if one of these supplies will work is to get one and try it. So many factors are in play as to whether or not such a supply compromises radio reception that generic/general statements are unlikely to be useful. Best regards, Dave amateur radio W9BRD

26468. Re: [regenrx] re: I'd advise you to make an audio amplifier in your power supply.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-22 15:30:31 UTC
From: Rob
Topic: 26436 Message: 26468

I've got four 0C3 tubes coming from different sources around the planet.
Don't know when they will arrive.

re...good time:

Is there any particular radio schematic that documents that CW enhancement
and
or
how to design to eliminate the hum?

What is the frequency of that hum? Line voltage 60Hz ?

Would it be advantageous to design an audio stage highpass output filter
that simply passes no low frequency below 200Hz
which would eliminate hum and provide crisp CW ?

On 05/22/2016 07:52 AM, david.newkirk@... [regenrx] wrote:
>
> Rob wrote:
>
>
> > Dang.... I just purchased two of the 2H chokes per the drawing
> instruction of of "2H or more".
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> > The prices on the 15H chokes are back out there in the $30 range.....
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> amplifier, temporarily remove its plate resistor (usually something
> between 47 k and 150 k) and connect one of your 2-H chokes in in its
> place. Then solder two 0.01-uF capacitors in parallel across the
> choke. This makes an audio tuned circuit (0.02 uF across 2 H) that
> will resonate in the vicinity of 800 Hz. See what tuning around for

> ham Morse-code transmissions sounds like with a distinct 800-Hz peak
> in your audio. The choke will pick up some hum, and the ove rall gain
> will probably be less than with the resistor you removed, but this
> gives you a glimpse of the possibilities of "tuned audio" with a regen.
>
> Best regards,
>
> Dave
> amateur radio W9BRD
>

26469. Re: [regenrx] re: I'd advise you to make an audio amplifier in your power supply.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-22 15:58:42 UTC
From: Richard
Topic: 26436 Message: 26469

Depends on line frequency and type of rectifier circuit. With 60 cycle line a half-wave rectifier gives 60 cycle ripple/hum. A full wave rectifier gives 120 cycle hum. Note that audio transformers, inductors, and even audio output transformers are efficient hum pickup coils, which is why it is wise to put the power supply on a separate chassis far from the receiver. Once-upon-a-time I had a Collins 75A-2 with the output transformer mounted next to the power transformer, and it had noticeable hum. I removed the output transformer, put it on long leads and moved it around the chassis trying to find a hum-free place, and there was NO place that was hum-free. I finally mounted it behind the PTO at an odd angle for minimum pickup.

The stray magnetic field from transformers increases exponentially with applied voltage, so you can dramatically reduce hum pickup by reducing input voltage, say to 110 volts or less, with no degradation in receiver performance.

Richard, AA1P

>
> What is the frequency of that hum? Line voltage 60Hz ?
>

26470. NIXIE tube power supplies for B+ ESR not plain electrolytics

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-22 16:12:42 UTC
From: Rob
Topic: 26452 Message: 26470

Got a picture of the modification?
It would interesting to see if its even the same IC chips.

and
when building 170 volt B+ supply
should I be concerned about ESR verses electrolytics........
for the 100uF 450 volt capacitors?

On 05/22/2016 10:50 AM, msalbert@... [regenrx] wrote:
>
> I don't know about the module under discussion, but one I bought had
> wrong type filter capacitors in it. Plain old lyrics , rather than a
> low ESR parts. It got quite hot in operation. Replacing it with a film
> capacitor helped a lot. So, you might look out for that.
> Regards,
>
> Mark KB9VKE
>
> -----Original Message-----
> From: J Ed jedwardsat1@... [regenrx] <regenrx@yahoogroups.com>
> To: regenrx <regenrx@yahoogroups.com>
> Sent: Sat, May 21, 2016 11:13 PM
> Subject: Re: [regenrx] Re: is it OK to use NIXIE tube power supplies
> for B+
>
>
>
>
>
> That's bad ass. I have been trying to build one using an MC36043
> switching controller.
>
> Ed AE7TE
>
> On May 21, 2016 8:30 PM, "Rob roomberg@...
> <mailto:roomberg@...> [regenrx]" <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>> wrote:
>
> I ordered one to play with.
> We'll see what happens.
>
>
> On 05/21/2016 05:20 PM, david.newkirk@...
> <mailto:david.newkirk@...> [regenrx] wrote:
>
> Rob wrote:

>
>
> > So what happens with these NIXIE power supplies?
> >Are they any use to us to experiment with tube regenerative
> receivers
> >that will hear radio transmission from anywhere on the planet?
>
> Your Walkman like heard power supplies inside computer
> cabinets by means of induction. (You may alos have heard noise
> near the supplies merely because that's where the noisy ac
> line came in.) That mechanism won't operate much with a
> dc-to-dc-con verter supply. What will matter more is how clean
> the output line is in terms of noise and RF junk. (Dc-to-dc
> converters include an oscillator that can generate harmonics.)
>
> The best way to find out if one of these supplies will work is
> to get one and try it. So many factors are in play as to
> whether or not such a supply compromises radio reception that
> generic/general statements are unlikely to be useful.
>
> Best regards,
>
> Dave
> amateur radio W9BRD
>
>
>
>
>

26471. Re: [regenrx] re: I'd advise you to make an audio amplifier in your power supply.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-22 17:25:20 UTC
From: david.newkirk@...
Topic: 26436 Message: 26471

Rob wrote:

> Is there any particular radio schematic that documents
> that CW enhancement and or
> how to design to eliminate the hum?

No. I mentioned it as a fun experiment based on my knowledge of _general_ practices in the late 1920s and early 1930s. Typically the tuned circuit used was a tuned Ford spark coil in the plate circuit of a tetrode or pentode AF voltage amplifier. (Tetrode or pentode was better than triode because the high plate resistance of such tubes loaded the AF tuned circuit less, increasingly selectivity.)

> What is the frequency of that hum? Line voltage 60Hz?

60 Hz and harmonics of same. Depending on the source and the transducer (choke), it may sound somewhat musical. It'll also change in timbre as the choke is rotated/moved as a result of variable coupling to various sources. As Richard has mentioned, of course, one's power supply is a major source of possible such hum. Keeping it inches to feet away "outboard" is a good idea. (Keeping power-supply heat away from receiver tuning circuits also minimizes warm-up drift.)

> Would it be advantageous to design an audio stage highpass output filter that
> simply passes no low frequency below 200Hz which would eliminate hum and provide crisp CW
?

For hum and 120 Hz and lower, maybe; but much of the hum you hear will be harmonics of 60 Hz and of 120 Hz, and right in your audio passband.

Again, I mentioned the choke-as-tuned-AF-filter idea as something fun to try, and from which you can learn and experience. An open-frame filter choke will pick up a lot of stuff because physics allows it to and isn't a good choice for passive filtering because (a) it picks up lots of stuff and (b) it's relatively low-Q. (Low Q equiates to broader peaking.)

What I do at W9BRD is use selectable passive _low pass_ filtering selectivity. The LMI-series filters by UTC (go to Ebay and search on UTC filter, and look for hits that aren't filter chokes; and also you can surely buy LMI-1000s from Surplus Sales of Nebraska (display the page at http://surplussales.com/Filters/Filters-1.html http://surplussales.com/Filters/Filters-1.html and search for "LMI-1000" in it). Anything more than $20 for one of these filters is overcharging.

I have switchable 400, 500, 800, 1000 and 3000-Hz filters in my utility filter/amplifier box (http://dpnwritings.nfshost.com/ej/pictures/pictures0.htm http://dpnwritings.nfshost.com/ej/pictures/pictures0.htm ; those pix were taken two filters ago) and they give me everything I need for two-way CW work. (Also have a "through" position to entiresly bypass the filters.) No, I don't have a schematic of the thing available at the moment.

By the way, the idea of building one's power supply in an outboard box, or building an AF filter/amplifier box, serves another important goal: These parts are relatively hard to find and cost more and more over time. If you'll use just one receiver at a time, why duplicate functionality in it that just sits there while another radio is in use? So I have stand-alone ("outboard") power supplies, and my AF/filtering circuit is stand-alone/outboard, and Molex connectors and RCA jacks and patch cords let me mix and match the receiving heads that drive them. One of my power supplies is based on the power transformer from an A-2516 receiver; its AF output transformer is inside the AF amplifier/filter box. Why have unused power and AF transformers (and handfuls of nice passive UTC filters) sitting in unused radios? I pretty much build just _tuners_ -- remember that concept from the 1950s/60s/70s audiophile days? -- and swap them in and out while the power supplies and AF/filter box stay the same.

Best regards,

Dave
amateur radio W9BRD

26472. Re: [regenrx] re: I'd advise you to make an audio amplifier in your power supply.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-22 19:17:09 UTC
From: Richard
Topic: 26436 Message: 26472

More on hum:
Another thing to try is a shorting copper band around the entire power transformer. "In theory" no flux can exist outside the band. It isn't that great, but I saw a reduction in hum.

The worst case I've seen is the Conar receiver. The power transformer is grossly overdriven and spews magnetic flux all over the receiver, even inducing ac into the IF transformer windings. I changed to a full-wave bridge rectifier, oriented the output transformer for minimum pickup, added the copper band, operated it at 100-110 volts, and it turned into a decent receiver.

Richard, AA1P

On 05/22/2016 11:58 AM, Richard wrote:
> Depends on line frequency and type of rectifier circuit. With 60
> cycle line a half-wave rectifier gives 60 cycle ripple/hum. A full
> wave rectifier gives 120 cycle hum. Note that audio transformers,
> inductors, and even audio output transformers are efficient hum pickup
> coils, which is why it is wise to put the power supply on a separate
> chassis far from the receiver. Once-upon-a-time I had a Collins 75A-2
> with the output transformer mounted next to the power transformer, and
> it had noticeable hum. I removed the output transformer, put it on
> long leads and moved it around the chassis trying to find a hum-free
> place, and there was NO place that was hum-free. I finally mounted it
> behind the PTO at an odd angle for minimum pickup.
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> The stray magnetic field from transformers increases exponentially
> with applied voltage, so you can dramatically reduce hum pickup by
> reducing input voltage, say to 110 volts or less, with no degradation
> in receiver performance.
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> Richard, AA1P
>
>>
>> What is the frequency of that hum? Line voltage 60Hz ?
>>
>

26473. Re: [regenrx] re: I'd advise you to make an audio amplifier in your power supply.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-22 19:20:11 UTC
From: Phil
Topic: 26436 Message: 26473

All interesting, with a of of good points presented.

When I designed my 1V3 LF Regen receiver (5 tubes in a 7 tube + Rect circuit counting the two double triodes, I started out with a basic premise. I then went on a parts scavenger hunt that turned up a number of items that caused me to revise (and improve) on what I'd originally come up with.

I needed all the 'iron' (power Xformer, filter choke, output Xformer etc, so I redesigned around what the parts search turned up. Over the past 60+ years I've done a LOT of work on tube type circuits, receivers, Xmitters & HiFi/Stereo stuff. So I have a good background to work with.

While I don't recall the exact specifics of the scrounged parts, the power transformer didn't have a center tap HV secondary, so instead of the usual half wave rectifier (for esthetic reasons I wanted to use a 6X4 rectifier), I ended up using 4 1N4007 diodes in a bridge circuit. I WANTED full wave as it's easier to filter 120CPS. When I built the receiver I hadn't yet bought my LCR meter, so I was unable to determine the exact value of the recycled DC Filter choke. I chose to use a Capacitor input filter, input capacitor is 47uF, the output capacitor from the choke is 47uF, then a 1.8K resistor followed by a 22uF filter capacitor. Following this is another 1.8K resistor that feeds the 0B2 regulator tube. The filtered B+ is for all practical purposes "battery pure", measuring under 50mV at the output of the filter choke, under 4mV across the 22uF capacitor (after the first 1.8K resistor) and 'zero' across the 0B2 regulator tube.

1. The audio output stage gets it's B+ from the output of the filter choke.

2. All other audio stages get their B+ from the output of the first 1.8K resistor (across the 22uF capacitor).

3. The entire RF section, 6AK5 RF amp, 1/2 12AU7 Armstrong Detector & the 1/2 12AU7 cathode follower (to feed external counter) receive their power from the 0B2 regulator.

3. To prevent "hum coupling" from the 6.3 VAC filament wiring, both sides of the filament string are floated above chassis, there is a 100 Ohm "Hum Balance" pot across the filament string whose center tap grounds to the chassis. In addition, there are .01uF capacitors from each pin of the 12AU7 to ground. This to keep both sides of the filament at RF ground potential (not sure that was needed).

THERE IS NO 60/120 CPS HUM IN THE BASIC DESIGN OF THE RECEIVER. Just a very little bit is coupled from the power Xformer coupling into the three audio chokes (adjustable 4-12H) used in the audio filtering. At first I found it distracting, but redesigning/rewiring the AF gain distribution, filter location in the chain of the AF sections basically eliminated it. . .

****

The audio filtering section.

When I went on the parts scavenger hunt I was offered three adjustable 4-12H AF chokes that had been removed from an AF filter by their 'donor'. They have three connections, one being a center tap. I used appropriate parallel capacitors to 'tune' them to 400, 600 & 1020 Hz (400 & 1020 being the modulation frequencies of most of the NDB's in the world). The filters are installed in a steel box to reduce any magnetic coupling from the power xformer. There are 6 audio bandwidths selectable via a front panel switch. They are

1. Wide (no AF filtering).

2. 400CPs.

3. 600CPs.

4. 1020CPs.

5. Low-Pass 1 (resistor/capacitor LPF, treble cut).

6. Low-Pass 2 (resistor capacitor LPF, steeper treble cut).

Overall I'm extremely pleased with this receiver, it has provided a LOT of NDB DX in the longwave range (tunes 150-530KCs in two ranges).

See pictures here. . .

http://s38.photobucket.com/user/ko6bb/library/Tube%20Type%20LF%20Regenerative%20Receiver?sort=9&page=1

73 From "The Beaconeer's Lair"
Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)

HF/LF RADIOS:
Grundigs: S-350 (~2006), G6 (2011) & S450DLX (2014).
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
Icom: IC-735 Transceiver (~1990).
Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
Icom: IC-7200 Transceiver (~2015).
R-Shack: DX-380 digital portable (~1990).
SDR: Softrock Ensemble II LF (built from a kit 2015).
Zenith: Royal-7000 Transoceanic Portable (~1968).

ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 4 Port Multicoupler, Feeds Antenna to 4 RX's.
HOMEBREW 8 Hz Audio Filter.
Timewave DSP-599zx Audio Filter.
Behringer 1202fx Audio Mixer (for mixing/routing audio).

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

On 5/22/2016 5:25 PM, david.newkirk@... [regenrx] wrote:
>
> Rob wrote:
>
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> > Is there any particular radio schematic that documents
> > that CW enhancement and or
> > how to design to eliminate the hum?
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> No. I mentioned it as a fun experiment based on my knowledge of
> _general_ practices in the late 1920s and early 1930s. Typically the
> tuned circuit used was a tuned Ford spark coil in the plate circuit of
> a tetrode or pentode AF voltage amplifier. (Tetrode or pentode was
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> transducer (choke), it may sound somewhat musical. It'll also change
> in timbre as the choke is rotated/moved as a result of variable
> coupling to various sources. As Richard has mentioned, of course,
> one's power supply is a major source of possible such hum. Keeping it
> inches to feet away "outboard" is a good idea. (Keeping power-supply
> heat away from receiver tuning circuits also minimizes warm-up drift.)
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> filter that
> > simply passes no low frequency below 200Hz which would eliminate hum
> and provide crisp CW ?
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> For hum and 120 Hz and lower, maybe; but much of the hum you hear will
> be harmonics of 60 Hz and of 120 Hz, and right in your audio passband.
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> Again, I mentioned the choke-as-tuned-AF-filter idea as something fun
> to try, and from which you can learn and experience. An open-frame
> filter choke will pick up a lot of stuff because physics allows it to
> and isn't a good choice for passive filtering because (a) it picks up
> lots of stuff and (b) it's relatively low-Q. (Low Q equiates to
> broader peaking.)

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> What I do at W9BRD is use selectable passive _low pass_ filtering
> selectivity. The LMI-series filters by UTC (go to Ebay and search on
> UTC filter, and look for hits that aren't filter chokes; and also you
> can surely buy LMI-1000s from Surplus Sales of Nebraska (display the
> page at http://surplussales.com/Filters/Filters-1.html and search for
> "LMI-1000" in it). Anything more than $20 for one of these filters is
> overcharging.
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> I have switchable 400, 500, 800, 1000 and 3000-Hz filters in my
> utility filter/amplifier box (
> http://dpnwritings.nfshost.com/ej/pictures/pictures0.htm ; those pix
> were taken two filters ago) and they give me everything I need for
> two-way CW work. (Also have a "through" position to entiresly bypass
> the filters.) No, I don't have a schematic of the thing available at
> the moment.
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> By the way, the idea of building one's power supply in an outboard
> box, or building an AF filter/amplifier box, serves another important
> goal: These parts are relatively hard to find and cost more and more
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> functionality in it that just sits there while another radio is in
> use? So I have stand-alone ("outboard") power supplies, and my
> AF/filtering circuit is stand-alone/outboard, and Molex connectors and
> RCA jacks and patch cords let me mix and match the receiving heads
> that drive them. One of my power supplies is based on the power
> transformer from an A-2516 receiver; its AF output transformer is
> inside the AF amplifier/filter box. Why have unused power and AF
> transformers (and handfuls of nice passive UTC filters) sitting in
> unused radios? I pretty much build just _tuners_ -- remember that
> concept from the 1950s/60s/70s audiophile days? -- and swap them in
> and out while the power supplies and AF/filter box stay the same.
>
> Best regards,
>
> Dave
> amateur radio W9BRD

26474. Re: [regenrx] NIXIE tube power supplies for B+ ESR not plain electrolytics

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-22 19:47:34 UTC
From: msalbert@...
Topic: 26452 Message: 26474

Sorry no pictures, the Nixie power supply module I bought used MC34063 but that doesn't matter. The switching frequency is what matters with regard to the rectifier and output filter capacitor immediately following. Both have to be high-speed capable parts. Don't worry too much about this; this is just my experience with only one module. Yours may be different. when you get your module, fire it up and see how hot the capacitors get. They should not feel warm at all. If they do, that's a sign of a high-ESR part. OTOH for a 60/120 Hz based power supply, the rectifier speed and capacitor ESR is not important at all. Any parts you have will work fine. Regards Mark KB9VKE -----Original Message----- From: Rob roomberg@... [regenrx] To: regenrx Sent: Sun, May 22, 2016 11:12 AM Subject: [regenrx] NIXIE tube power supplies for B+ ESR not plain electrolytics

Got a picture of the modification? It would interesting to see if its even the same IC chips. and when building 170 volt B+ supply should I be concerned about ESR verses electrolytics..... for the 100uF 450 volt capacitors?
On 05/22/2016 10:50 AM, msalbert@... [regenrx] wrote:

I don't know about the module under discussion, but one I bought had wrong type filter capacitors in it. Plain old lyrics , rather than a low ESR parts. It got quite hot in operation. Replacing it with a film capacitor helped a lot. So, you might look out for that. Regards,
Mark KB9VKE -----Original Message----- From: J Ed jedwardsat1@... [regenrx] To: regenrx Sent: Sat, May 21, 2016 11:13 PM Subject: Re: [regenrx] Re: is it OK to use NIXIE tube power supplies for B+

That's bad ass. I have been trying to build one using an MC36043 switching controller.

Ed AE7TE

On May 21, 2016 8:30 PM, "Rob roomberg@... [regenrx]" <regenrx@yahoogroups.com> wrote:

I ordered one to play with. We'll see what happens.

On 05/21/2016 05:20 PM, david.newkirk@... [regenrx] wrote:

Rob wrote:

> So what happens with these NIXIE power supplies? > Are they any use to us to experiment with tube regenerative receivers > that will hear radio transmission from anywhere on the planet? Your Walkman like heard power supplies inside computer cabinets by means of induction. (You may alos have heard noise near the supplies merely because that's where the noisy ac line came in.) That mechanism won't operate much with a dc-to-dc-con verter supply. What will matter more is how clean the output line is in terms of noise and RF junk. (Dc-to-dc converters include an oscillator that can generate harmonics.) The best way to find out if one of these supplies will work is to get one and try it. So many factors are in play as to whether or not such a supply compromises radio reception that generic/general statements are unlikely to be useful. Best regards, Dave amateur radio

W9BRD

26475. Re: [regenrx] re: I'd advise you to make an audio amplifier in your power supply.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-22 21:09:13 UTC
From: david.newkirk@...
Topic: 26436 Message: 26475

Richard wrote:

> The worst case I've seen is the Conar receiver....

There's always more to learn, and it's fun even when annoyance is the driver. I learned in a page on the JR-500S receiver (the Trio-branded version of the Allied A-2516 receiver) that one of the weaknesses in that design is that the B+ rectifier is at one side of the receiver and the multi-section filter cap is at the other side, with a run of something like 9 to 11 inches of wire connecting the rectifier (half wave!) to the first filter cap. The relatively high-current charging pulses to the first cap zip through that long wire run, inducing hum into adjacent circuitry along the way. Cure: Move at least the first filter cap (using a separate capacitor) to a spot right next to the rectifier. (And of course change the rectifier to full-wave. The A-2516 power transformer runs very noticeably cooler to the touch with full-wave rectification.)

Another hummerific experience awaits owners of the Heathkit HR-10 receiver. Some years back, as I awaited the arrival of one from an Ebay purchase, I read the following in George Grammer's review of the receiver in July 1963 _QST_:

"Aside from this, the only thing that can be criticized is the hum in headphone reception. This is not simply a matter of plate-supply filtering--more filter was tried with little improvement--but appears to be tied up with a.c. currents arising from the heater wiring. It goes through a minimum at a rather high setting of the audio gain control, at which point it can be fairly well masked by noise and signals at high settings of the r.f. gain control, if your eardrums can sand that much volume. An external attenuator for the headphones would probably help in this respect."

When my HR-10 arrived and I got it going after some preventive re-capping, there was that exact hum, complete with the partial null occurring at a point short of the high end of the AF GAIN range. (That a null occurs means that the hum we hear comes from at least two different paths, one from before the AF GAIN control and another after. The two (or the two main) sources are out of phase, so setting one path to the right amplitude cancels the composite hum, at least pretty much.) Oh, ho, I'll fool you: I'll rewire the output tube as a power cathode follower (with no output transformer to pick up hum). Same hum! Okay, no chassis return for the heater wiring; I'll lift the ground returns for each stage, run _two_ wires, and balance it out. Nope; no change. All right, then, external dc supply for the heaters. Same hum! Scrap time!

Every millisecond spent abating or avoiding hum I consider to be time wasted (time that could have been spent on radio). I especially have no sense of humor about self-inflicted problems that arise from using a big audio signal to heat tubes that...duhh...amplify or generate audio. I love me my 13-V, 4- and 30- amp dc supplies! (And psst: One reason hum with Yesteryear's receivers was more tolerable was that communicators didn't listen with hi-fi headphones. In particular the magnetic headphones popular in the heyday of the regen had almost no low-end response, and popular receiving pitches were more likely to be nearer

to 1000 Hz than below 500.)

If you're using ac-heated tubes without hum problems, good for you! I am and will remian unmoved. :-)

Best regards,

Dave
amateur radio W9BRD

26476. Re: [regenrx] NIXIE tube power supplies for B+ ESR not plain electrolytics

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-22 21:44:13 UTC
From: Rob
Topic: 26452 Message: 26476

I'll go quiet now until the tubes and transformers and chokes arrive
from China, Russia and Italy.
Thanks for all the input from everybody.

On 05/22/2016 03:47 PM, msalbert@... [regenrx] wrote:
>
> Sorry no pictures, the Nixie power supply module I bought used MC34063
> but that doesn't matter. The switching frequency is what matters with
> regard to the rectifier and output filter capacitor immediately
> following. Both have to be high-speed capable parts. Don't worry too
> much about this; this is just my experience with only one module.
> Yours may be different. when you get your module, fire it up and see
> how hot the capacitors get. They should not feel warm at all. If they
> do, that's a sign of a high-ESR part.
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> OTOH for a 60/120 Hz based power supply, the rectifier speed and
> capacitor ESR is not important at all. Any parts you have will work fine.
> Regards
> Mark KB9VKE
>
> -----Original Message-----
> From: Rob roomberg@... [regenrx] <regenrx@yahoogroups.com>
> To: regenrx <regenrx@yahoogroups.com>
> Sent: Sun, May 22, 2016 11:12 AM
> Subject: [regenrx] NIXIE tube power supplies for B+ ESR not plain elec
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> On 05/22/2016 10:50 AM, msalbert@... <mailto:msalbert@...>
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> From: J Ed jedwardsat1@... <mailto:jedwardsat1@...>
> [regenrx] <regenrx@yahoogroups.com> <mailto:regenrx@yahoogroups.com>
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> Sent: Sat, May 21, 2016 11:13 PM
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> That's bad ass. I have been trying to build one using an MC36043
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> I ordered one to play with.
> We'll see what happens.
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> <mailto:david.newkirk@...> [regenrx] wrote:
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> Rob wrote:
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>
> > So what happens with these NIXIE power supplies?
> >Are they any use to us to experiment with tube
> regenerative receivers
> >that will hear radio transmission from anywhere on the planet?
>
> Your Walkman like heard power supplies inside computer
> cabinets by means of induction. (You may alos have heard
> noise near the supplies merely because that's where the
> noisy ac line came in.) That mechanism won't operate much
> with a dc-to-dc-con verter supply. What will matter more
> is how clean the output line is in terms of noise and RF
> junk. (Dc-to-dc converters include an oscillator that can

> generate harmonics.)
>
> The best way to find out if one of these supplies will
> work is to get one and try it. So many factors are in play
> as to whether or not such a supply compromises radio
> reception that generic/general statements are unlikely to
> be useful.
>
> Best regards,
>
> Dave
> amateur radio W9BRD
>
>
>
>
>
>
>
>

26477. Re: [regenrx] re: I'd advise you to make an audio amplifier in your power supply.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-22 22:03:59 UTC
From: Richard
Topic: 26436 Message: 26477

Yes, and it can be subtle. the RAL receiver, a very good regen, has a wee bit of hum which the instruction book says can be used as an indication that it's working properly. It's due to pickup in the audio filter inductors from the heater wiring. Switch out the low-pass filter - no hum. DC on the heaters - no hum. I'm a hum-bug.

Richard, AA1P

On 05/22/2016 05:09 PM, david.newkirk@... [regenrx] wrote:
>
> Richard wrote:
>
>
> > The worst case I've seen is the Conar receiver....
>
> There's always more to learn, and it's fun even when annoyance is the
> driver. I learned in a page on the JR-500S receiver (the Trio-branded
> version of the Allied A-2516 receiver) that one of the weaknesses in
> that design is that the B+ rectifier is at one side of the receiver
> and the multi-section filter cap is at the other side, with a run of
> something like 9 to 11 inches of wire connecting the rectifier (half
> wave!) to the first filter cap. The relatively high-current charging
> pulses to the first cap zip through that long wire run, inducing hum
> into adjacent circuitry along the way. Cure: Move at least the first
> filter cap (using a separate capacitor) to a spot right next to the
> rectifier. (And of course change the rectifier to full-wave. The
> A-2516 power transformer runs very noticeably cooler to the touch with
> full-wave rectification.)
>
> Another hummerific experience awaits owners of the Heathkit HR-10
> receiver. Some years back, as I awaited the arrival of one from an
> Ebay purchase, I read the following in George Grammer's review of the
> receiver in July 1963 _QST_:
>
> "Aside from this, the only thing that can be criticized is the hum in
> headphone reception. This is not simply a matter of plate-supply
> filtering--more filter was tried with little improvement--but appears
> to be tied up with a.c. currents arising from the heater wiring. It
> goes through a minimum at a rather high setting of the audio gain
> control, at which point it can be fairly well masked by noise and
> signals at high settings of the r.f. gain control, if your eardrums
> can sand that much volume. An external attenuator for the headphones
> would probably help in this respect."
>

> When my HR-10 arrived and I got it going after some preventive
> re-capping, there was that exact hum, complete with the partial null
> occurring at a point short of the high end of the AF GAIN range. (That
> a null occurs means that the hum we hear comes from at least two
> different paths, one from before the AF GAIN control and another
> after. The two (or the two main) sources are out of phase, so setting
> one path to the right amplitude cancels the composite hum, at least
> pretty much.) Oh, ho, I'll fool you: I'll rewire the output tube as a
> power cathode follower (with no output transformer to pick up hum).
> Same hum! Okay, no chassis return for the heater wiring; I'll lift the
> ground returns for each stage, run _two_ wires, and balance it out.
> Nope; no change. All right, then, external dc supply for the heaters.
> Same hum! Scrap time!
>
> Every millisecond spent abating or avoiding hum I consider to be time
> wasted (time that could have been spent on radio). I especially have
> no sense of humor about self-inflicted problems that arise from using
> a big audio signal to heat tubes that...duhh...amplify or generate
> audio. I love me my 13-V, 4- and 30- amp dc supplies! (And psst: One
> reason hum with Yesteryear's receivers was more tolerable was that
> communicators didn't listen with hi-fi headphones. In particular the
> magnetic headphones popular in the heyday of the regen had almost no
> low-end response, and popular receiving pitches were more likely to be
> nearer to 1000 Hz than below 500.)
>
> If you're using ac-heated tubes without hum problems, good for you! I
> am and will remian unmoved. :-)
>
> Best regards,
>
> Dave
> amateur radio W9BRD
>
>

26478. Re: [regenrx] NIXIE tube power supplies for B+ ESR not plain electrolytics

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-22 22:30:34 UTC
From: msalbert@...
Topic: 26452 Message: 26478

One more post about the nixie power supply ;-) The particular module I bought is still on ebay
http://www.ebay.com/itm/High-Voltage-Power-Supply-Kit-45V-to-190V-Out-for-Nixie-Old-Radio-Kit-/252389307492?hash=item3ac3933464:g:u-oAAOxyq5NRDbye#ht_962wt_1246

you can download the instructions and schematic from the listing. The capacitor I changed from lytic to film was C4, a 2.2uF/250V. I noticed they now mention changing this cap as an improvement but don't say what type capacitor the new part is. Also, I found the solenoid inductor was a source of RFI to nearby radios. Changing that to a toroid or putting the whole rig inside a metal box may help but I haven't tried any of that.

Hope this helps!
Regards
Mark KB9VKE

26479. Re: is it OK to use NIXIE tube power supplies for B+

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-23 08:46:51 UTC
From: les.au49@...
Topic: 26452 Message: 26479

Hello Mark,

I ordered two power supplys referred to in the link above, from the person at the same link.

When the card arrived it didn't work, and after a few minutes I saw the switching FET was reversed.
I described the problem to Tortugascuba (who sold it) and he claimed the card was supplied as a kit, not assembled. Well - he was wrong. I'm clever enough to recognize the difference between a kit and and an assembled card.

My point in complaining was this - if I touched the board - the problem was mine.
It was his problem, and he should have fixed it.

I fitted a replacement FET (an easy task) and the card worked.
In the end I got two boards that worked, and the cost of the FET I supplied was close to "zip".

I haven't used the board "on air" so I can't make a comment on whether it generates noise (or not).
I imagine you won't hear it when it's inside a diecast box, with a choke on the supply lines.

Les

26480. OC3 base

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-25 18:48:11 UTC
From: Rob
Topic: 26436 Message: 26480

OC3 power supply tubes arrived.

I don't have anything that looks like this base with a keyed center pin.
http://www.learnmorsecode.com/regen4/0C3base.jpg
Does anyone have a base they want to sell to me?

Robert Roomberg
12 West Front Street
Jim Thorpe PA 18229

26481. Re: [regenrx] OC3 base

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-25 19:12:13 UTC
From: Richard
Topic: 26436 Message: 26481

That's a standard octal tube base with two pins omitted that aren't used. Any old octal socket will work fine.

Richard, AA1P

On 05/25/2016 02:48 PM, Rob roomberg@... [regenrx] wrote:
>
> OC3 power supply tubes arrived.
>
> I don't have anything that looks like this base with a keyed center pin.
> http://www.learnmorsecode.com/regen4/0C3base.jpg
> Does anyone have a base they want to sell to me?
>
> Robert Roomberg
> 12 West Front Street
> Jim Thorpe PA 18229
>
>

26482. Re: [regenrx] OC3 base

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-25 18:48:59 UTC
From: J Ed
Topic: 26436 Message: 26482

That's called an octal base.

Ed AE7TE

On Wed, May 25, 2016 at 11:48 AM, Rob roomberg@... [regenrx] <
regenrx@yahoogroups.com> wrote:

>
>
> OC3 power supply tubes arrived.
>
> I don't have anything that looks like this base with a keyed center pin.
> http://www.learnmorsecode.com/regen4/0C3base.jpg
> Does anyone have a base they want to sell to me?
>
> Robert Roomberg
> 12 West Front Street
> Jim Thorpe PA 18229
>
>
>

26483. Re: [regenrx] OC3 base

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-25 19:51:07 UTC
From: Bill Cromwell
Topic: 26436 Message: 26483

Hi Rob,

That's just an octal base and will plug into any octal socket. What kind
of socket does your radio have?

73,

Bill KU8H

On 05/25/2016 02:48 PM, Rob roomberg@... [regenrx] wrote:
>
> OC3 power supply tubes arrived.
>
> I don't have anything that looks like this base with a keyed center pin.
> http://www.learnmorsecode.com/regen4/0C3base.jpg
> Does anyone have a base they want to sell to me?
>
> Robert Roomberg
> 12 West Front Street
> Jim Thorpe PA 18229
>
>

--
"Intelligence from the internet is unreliable because we cannot verify it's accuracy nor
the author's credentials."

- Julius Caesar

26484. how to wire an LED street light

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-25 20:26:00 UTC
From: Rob
Topic: 26484 Message: 26484

I bought an LED street light with no documentation.
Does anyone have one of these and can anyone tell me how to wire it to household mains?
It has a tag that says AC220V so I am assuming that means it gets connected to two opposing
rails of the 110V circuit breakers just like a stove or oven or hot water heater....

but which wires?

http://www.learnmorsecode.com/regen4/streetlight2.jpg

26485. Re: [regenrx] OC3 base

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-25 20:32:55 UTC
From: Rob
Topic: 26436 Message: 26485

I do not have a radio... yet....
I am building a power supply to be able to build tube radios.

On 05/25/2016 03:51 PM, Bill Cromwell wrcromwell@gmail.com [regenrx] wrote:
>
> Hi Rob,
>
> That's just an octal base and will plug into any octal socket. What kind
> of socket does your radio have?
>
> 73,
>
> Bill KU8H
>
> On 05/25/2016 02:48 PM, Rob roomberg@... [regenrx] wrote:
> >
> > OC3 power supply tubes arrived.
> >
> > I don't have anything that looks like this base with a keyed center pin.
> > http://www.learnmorsecode.com/regen4/0C3base.jpg
> > Does anyone have a base they want to sell to me?
> >
> > Robert Roomberg
> > 12 West Front Street
> > Jim Thorpe PA 18229
> >
> >
>
> --
> "Intelligence from the internet is unreliable because we cannot verify
> it's accuracy nor the author's credentials."
>
> - Julius Caesar
>
>

26486. Re: [regenrx] OC3 base

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-25 19:05:36 UTC
From: Phil
Topic: 26436 Message: 26486

Robert,

That looks like a standard Octal Tube base, very common in the 40's-50's
(and maybe earlier).

I have some 'recycled' ones, and if you need it can mail one in a padded
envelope, though it'll probably be at least a couple days before I can.
Wifey is being released from Anberry (Physical rehab) in about an hour
and I expect the next couple days will be pretty hectic.

73 From "The Beaconeer's Lair"
Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)

HF/LF RADIOS:
Grundigs: S-350 (~2006), G6 (2011) & S450DLX (2014).
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
Icom: IC-735 Transceiver (~1990).
Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
Icom: IC-7200 Transceiver (~2015).
R-Shack: DX-380 digital portable (~1990).
SDR: Softrock Ensemble II LF (built from a kit 2015).
Zenith: Royal-7000 Transoceanic Portable (~1968).

ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 4 Port Multicoupler, Feeds Antenna to 4 RX's.
HOMEBREW 8 Hz Audio Filter.
Timewave DSP-599zx Audio Filter.
Behringer 1202fx Audio Mixer (for mixing/routing audio).

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

On 5/25/2016 6:48 PM, Rob roomberg@... [regenrx] wrote:
>
> OC3 power supply tubes arrived.
>
> I don't have anything that looks like this base with a keyed center pin.
> http://www.learnmorsecode.com/regen4/0C3base.jpg
> Does anyone have a base they want to sell to me?
>
> Robert Roomberg
> 12 West Front Street
> Jim Thorpe PA 18229

>

26487. Re: [regenrx] OC3 base

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-25 22:16:43 UTC
From: Rob
Topic: 26436 Message: 26487

I ordered a dozen from China.
Good luck with the wife.

On 05/25/2016 03:05 PM, Phil ko6bb1@... [regenrx] wrote:
>
> Robert,
>
> That looks like a standard Octal Tube base, very common in the 40's-50's
> (and maybe earlier).
>
> I have some 'recycled' ones, and if you need it can mail one in a padded
> envelope, though it'll probably be at least a couple days before I can.
> Wifey is being released from Anberry (Physical rehab) in about an hour
> and I expect the next couple days will be pretty hectic.
>
> 73 From "The Beaconeer's Lair"
> Phil, KO6BB
> http://www.qsl.net/ko6bb/ (Web Page)
>
> HF/LF RADIOS:
> Grundigs: S-350 (~2006), G6 (2011) & S450DLX (2014).
> HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
> Icom: IC-735 Transceiver (~1990).
> Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
> Icom: IC-7200 Transceiver (~2015).
> R-Shack: DX-380 digital portable (~1990).
> SDR: Softrock Ensemble II LF (built from a kit 2015).
> Zenith: Royal-7000 Transoceanic Portable (~1968).
>
> ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
> HOMEBREW 4 Port Multicoupler, Feeds Antenna to 4 RX's.
> HOMEBREW 8 Hz Audio Filter.
> Timewave DSP-599zx Audio Filter.
> Behringer 1202fx Audio Mixer (for mixing/routing audio).
>
> ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
> Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
> 37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.
>
> Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh
>
> On 5/25/2016 6:48 PM, Rob roomberg@... [regenrx] wrote:
> >
> > OC3 power supply tubes arrived.
> >

> > I don't have anything that looks like this base with a keyed center pin.
> > http://www.learnmorsecode.com/regen4/0C3base.jpg
> > Does anyone have a base they want to sell to me?
> >
> > Robert Roomberg
> > 12 West Front Street
> > Jim Thorpe PA 18229
> >
>
>

26488. Re: [regenrx] OC3 base

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-25 23:47:18 UTC
From: Adrian Flynn
Topic: 26436 Message: 26488

Good luck with the China sockets.

73
Adrian KF7DYU
Adrian, Mi.
On May 25, 2016 6:16 PM, "Rob roomberg@... [regenrx]" <
regenrx@yahoogroups.com> wrote:

>
>
> I ordered a dozen from China.
> Good luck with the wife.
>
>
> On 05/25/2016 03:05 PM, Phil ko6bb1@... [regenrx] wrote:
>
>
>
> Robert,
>
> That looks like a standard Octal Tube base, very common in the 40's-50's
> (and maybe earlier).
>
> I have some 'recycled' ones, and if you need it can mail one in a padded
> envelope, though it'll probably be at least a couple days before I can.
> Wifey is being released from Anberry (Physical rehab) in about an hour
> and I expect the next couple days will be pretty hectic.
>
> 73 From "The Beaconeer's Lair"
> Phil, KO6BB
> http://www.qsl.net/ko6bb/ (Web Page)
>
> HF/LF RADIOS:
> Grundigs: S-350 (~2006), G6 (2011) & S450DLX (2014).
> HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
> Icom: IC-735 Transceiver (~1990).
> Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
> Icom: IC-7200 Transceiver (~2015).
> R-Shack: DX-380 digital portable (~1990).
> SDR: Softrock Ensemble II LF (built from a kit 2015).
> Zenith: Royal-7000 Transoceanic Portable (~1968).
>
> ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
> HOMEBREW 4 Port Multicoupler, Feeds Antenna to 4 RX's.
> HOMEBREW 8 Hz Audio Filter.

> Timewave DSP-599zx Audio Filter.
> Behringer 1202fx Audio Mixer (for mixing/routing audio).
>
> ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
> Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
> 37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.
>
> Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh
>
> On 5/25/2016 6:48 PM, Rob roomberg@... [regenrx] wrote:
> >
> > OC3 power supply tubes arrived.
> >
> > I don't have anything that looks like this base with a keyed center pin.
> > http://www.learnmorsecode.com/regen4/0C3base.jpg
> > Does anyone have a base they want to sell to me?
> >
> > Robert Roomberg
> > 12 West Front Street
> > Jim Thorpe PA 18229
> >
>
>
>
>

26489. Re: [regenrx] how to wire an LED street light figured it out

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-26 02:36:23 UTC
From: Rob
Topic: 26484 Message: 26489

I figured it out.
I opened it up and saw the blue and brown wires connected to the power supply marked
line and neutral.
http://www.learnmorsecode.com/regenx/choke/streetcontrol.jpg

The yellow ground wire is not connected.

It definitely is a pure white light street lamp..... and at 36 watts is just another space age win for technology saving the planet.

On 05/25/2016 04:26 PM, Rob roomberg@... [regenrx] wrote:
>
> I bought an LED street light with no documentation.
> Does anyone have one of these and can anyone tell me how to wire it to
> household mains?
> It has a tag that says AC220V so I am assuming that means it gets
> connected to two opposing
> rails of the 110V circuit breakers just like a stove or oven or hot
> water heater....
>
> but which wires?
>
> http://www.learnmorsecode.com/regen4/streetlight2.jpg
>
>

26490. Re: [regenrx] how to wire an LED street light

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-25 21:19:40 UTC
From: msalbert@...
Topic: 26484 Message: 26490

Blue is neutral, Brown is hot. Per the European wiring color standards. Green/yellow is ground. Looks interesting, let us know how it works out. Shouldn't require much power; rather than running 220v to it a small step up transformer might be more convenient. Regards, Mark KB9VKE -----Original Message----- From: Rob roomberg@... [regenrx] To: regenrx Sent: Wed, May 25, 2016 03:26 PM Subject: [regenrx] how to wire an LED street light I bought an LED street light with no documentation. Does anyone have one of these and can anyone tell me how to wire it to household mains? It has a tag that says AC220V so I am assuming that means it gets connected to two opposing rails of the 110V circuit breakers just like a stove or oven or hot water heater.... but which wires? http://www.learnmorsecode.com/regen4/streetlight2.jpg ---------- Posted by: Rob <roomberg@...> ---------- "In the interest of Regenerating radio's lost art of Regeneration" ---------- Yahoo Groups Links

26491. How to test a power supply choke

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-25 23:54:09 UTC
From: Rob
Topic: 26436 Message: 26491

New 1.5H choke costs $15.
22 gauge wire costs $5 at WALMART.

Not sure how to test unknown chokes.
Not all the parts arrived yet to build all the power supply but I am curious
how to know if I got the desired result or if this was a really bad idea:

http://www.learnmorsecode.com/regenx/choke/index2.html

On 05/22/2016 07:37 AM, david.newkirk@... [regenrx] wrote:
> That's true. There's smoothing/filtering and then there's supply
> voltage regulation. Especially if the receiver isn't a many-tube
> superhet with AGC, the power supply load won't vary much at all during
> operation. Even just a few henries, especially in conjunction with the
> multi-hundred-uF caps available cheaply today, will still provide very
> useful ripple reduction.
>
> To keep us all on these same page: All an inter-filter-C resistor does
> to help filtering is slow discharge of the capacitor[s] ahead of it.
> But using a choke--an inductor--instead does that and more. The "more"
> is that the choke stores energy in its magnetic field. Every time
> current through the choke starts to decrease, its magnetic field
> collapses a little, "trying" to maintain the current flow through the
> choke; likewise, every time current through the choke starts to
> increase, some of that increase goes into strengthening the magnetic
> field around the choke and slowing the buildup of current through the
> choke. In effect, the choke smooths ripple _by resisting changes in
> the current flow through it_.
>
> A filter capacitor reduces ripple by storing energy in an _electric_
> field, and sourcing energy from that field when the voltage across its
> terminals starts to drop (such as between charging pulses from the
> rectifiers that charge it). So building a power-supply filter with
> parallel capacitors (supply line to ground) and series inductors (in
> series with the supply line) irons out ripple "coming and going." The
> capacitors prop up the supply voltage when voltage starts to sag; the
> inductors prop up supply _current_ when _current_ starts to sag.
> Ripple (ac superimposed on the supply's dc output) is just a small
> cyclical sag that we want to iron out.
>
> And BTW if we want to think of a power-supply filter as a big low-pass
> filter, that works, too! Ripple is just a frequency compoment we want
> not to show up superimposed on the supply's big dc output signal.

26492. Re: [regenrx] how to wire an LED street light

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-26 04:35:09 UTC
From: Rob
Topic: 26484 Message: 26492

It cost $32. Works great on regular 110 AC.
The unit is definitely designed for USA service, not the labeled AC220V
3 wire configuration.
Image shows how it was shipped... I did not change anything. I just
removed the cover and took the picture.
http://www.learnmorsecode.com/regenx/choke/streetcontrol.jpg
The yellow wire was floating free in the case.

I will definitely install more of these.

On 05/25/2016 05:19 PM, msalbert@... [regenrx] wrote:
>
> Blue is neutral, Brown is hot. Per the European wiring color
> standards. Green/yellow is ground. Looks interesting, let us know how
> it works out. Shouldn't require much power; rather than running 220v
> to it a small step up transformer might be more convenient.
> Regards,
>
> Mark KB9VKE
>
> -----Original Message-----
> From: Rob roomberg@... [regenrx] <regenrx@yahoogroups.com>
> To: regenrx <regenrx@yahoogroups.com>
> Sent: Wed, May 25, 2016 03:26 PM
> Subject: [regenrx] how to wire an LED street light
>
>
> I bought an LED street light with no documentation.
> Does anyone have one of these and can anyone tell me how to wire it to
> household mains?
> It has a tag that says AC220V so I am assuming that means it gets
> connected to two opposing
> rails of the 110V circuit breakers just like a stove or oven or hot
> water heater....
>
> but which wires?
>
> http://www.learnmorsecode.com/regen4/streetlight2.jpg
> <http://www.learnmorsecode.com/regen4/streetlight2.jpg%0A%20>
>
>
>
> ------------------------------------
> Posted by: Rob <roomberg@... <mailto:roomberg@...>>
> ------------------------------------

>
> "In the interest of Regenerating radio's lost art of Regeneration"
> ---
>
> Yahoo Groups Links
>
>
>
>

26493. Re: [regenrx] OC3 base

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-26 00:45:18 UTC
From: Phil
Topic: 26436 Message: 26493

Thank you.

I've found the quality of the Chinese ceramic sockets varies widely.
When I built my regen last summer I ordered some ceramic 7 pin, 9 pin
and octal sockets. The 9 pin were good, (had tube shield bases and
shields), the octal were good, but the 7 pin were terrible. They
consisted of a ceramic base which the socket pins slid into, then the
pins were held in place via a thin and brittle wafer. The wafer of
every one that I tried to use broke into pieces and the pins fell out. I
junked all of the 7 pin ones and used some that came from a parted out
piece of gear.

73 From "The Beaconeer's Lair"
Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)

HF/LF RADIOS:
Grundigs: S-350 (~2006), G6 (2011) & S450DLX (2014).
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
Icom: IC-735 Transceiver (~1990).
Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
Icom: IC-7200 Transceiver (~2015).
R-Shack: DX-380 digital portable (~1990).
SDR: Softrock Ensemble II LF (built from a kit 2015).
Zenith: Royal-7000 Transoceanic Portable (~1968).

ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 4 Port Multicoupler, Feeds Antenna to 4 RX's.
HOMEBREW 8 Hz Audio Filter.
Timewave DSP-599zx Audio Filter.
Behringer 1202fx Audio Mixer (for mixing/routing audio).

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

On 5/25/2016 11:47 PM, Adrian Flynn ADRIANJAMESFLYNN@... [regenrx]
wrote:
>
> Good luck with the China sockets.
>
> 73
> Adrian KF7DYU
> Adrian, Mi.
>

26494. Re: [regenrx] How to test a power supply choke

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-26 06:29:56 UTC
From: J Ed
Topic: 26436 Message: 26494

You can get 24g wire from ethernet cable as it's made from four twisted pairs. For currents under 100 mA you should be fine. To ensure that it doesn't suffer voltage breakdown, you could get or make plastic standoff pieces to ensure the wire isn't accidentally contacting a grounded piece of metal so insulation breakdown occurs.

To test the ripple of the circuit, you need an oscilloscope and a capacitor to block the DC from the supply. Drawing current from your supply, you can measure the AC ripple from the supply. Unloaded, the power supply will show very little ripple.

Not having a scope, you can hook it up to the radio in question and turn the gain up. If you hear hum at an objectionable level, more filtering is needed. This is a reason that direct conversion receivers are recommended to be run with batteries...the normally have around 100dB of audio gain and so the ripple needs to be reduced to a ridiculously low value.

As for filter chokes, you need to measure their impedance while running a DC current through them. The inductance changes with DC in the coil and to properly test the choke you need to recreate it's operating conditions. Another thing you could do is build a power supply with it, measure the ripple in and ripple out, then use that to calculate its inductance value.

Ed AE7TE
On May 25, 2016 7:50 PM, "Rob roomberg@... [regenrx]" <
regenrx@yahoogroups.com> wrote:

>
>
> New 1.5H choke costs $15.
> 22 gauge wire costs $5 at WALMART.
>
> Not sure how to test unknown chokes.
> Not all the parts arrived yet to build all the power supply but I am
> curious
> how to know if I got the desired result or if this was a really bad idea:
>
> http://www.learnmorsecode.com/regenx/choke/index2.html
>
>
>
>
>
> On 05/22/2016 07:37 AM, david.newkirk@... [regenrx] wrote:
>
> That's true. There's smoothing/filtering and then there's supply voltage

> regulation. Especially if the receiver isn't a many-tube superhet with AGC,
> the power supply load won't vary much at all during operation. Even just a
> few henries, especially in conjunction with the multi-hundred-uF caps
> available cheaply today, will still provide very useful ripple reduction.
>
> To keep us all on these same page: All an inter-filter-C resistor does to
> help filtering is slow discharge of the capacitor[s] ahead of it. But using
> a choke--an inductor--instead does that and more. The "more" is that the
> choke stores energy in its magnetic field. Every time current through the
> choke starts to decrease, its magnetic field collapses a little, "trying"
> to maintain the current flow through the choke; likewise, every time
> current through the choke starts to increase, some of that increase goes
> into strengthening the magnetic field around the choke and slowing the
> buildup of current through the choke. In effect, the choke smooths ripple
> _by resisting changes in the current flow through it_.
>
> A filter capacitor reduces ripple by storing energy in an _electric_
> field, and sourcing energy from that field when the voltage across its
> terminals starts to drop (such as between charging pulses from the
> rectifiers that charge it). So building a power-supply filter with parallel
> capacitors (supply line to ground) and series inductors (in series with the
> supply line) irons out ripple "coming and going." The capacitors prop up
> the supply voltage when voltage starts to sag; the inductors prop up supply
> _current_ when _current_ starts to sag. Ripple (ac superimposed on the
> supply's dc output) is just a small cyclical sag that we want to iron out.
>
> And BTW if we want to think of a power-supply filter as a big low-pass
> filter, that works, too! Ripple is just a frequency compoment we want not
> to show up superimposed on the supply's big dc output signal.
>
>
>
>

26495. Re: [regenrx] How to test a power supply choke

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-26 03:47:34 UTC
From: Rob
Topic: 26436 Message: 26495

oops link works now

On 05/25/2016 07:54 PM, Rob roomberg@... [regenrx] wrote:
>
> New 1.5H choke costs $15.
> 22 gauge wire costs $5 at WALMART.
>
> Not sure how to test unknown chokes.
> Not all the parts arrived yet to build all the power supply but I am
> curious
> how to know if I got the desired result or if this was a really bad idea:
>
> http://www.learnmorsecode.com/regenx/choke/index2.html
>
>
>
>
>
> On 05/22/2016 07:37 AM, david.newkirk@... [regenrx] wrote:
>
>> That's true. There's smoothing/filtering and then there's supply
>> voltage regulation. Especially if the receiver isn't a many-tube
>> superhet with AGC, the power supply load won't vary much at all
>> during operation. Even just a few henries, especially in conjunction
>> with the multi-hundred-uF caps available cheaply today, will still
>> provide very useful ripple reduction.
>>
>> To keep us all on these same page: All an inter-filter-C resistor
>> does to help filtering is slow discharge of the capacitor[s] ahead of
>> it. But using a choke--an inductor--instead does that and more. The
>> "more" is that the choke stores energy in its magnetic field. Every
>> time current through the choke starts to decrease, its magnetic field
>> collapses a little, "trying" to maintain the current flow through the
>> choke; likewise, every time current through the choke starts to
>> increase, some of that increase goes into strengthening the magnetic
>> field around the choke and slowing the buildup of current through the
>> choke. In effect, the choke smooths ripple _by resisting changes in
>> the current flow through it_.
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>> A filter capacitor reduces ripple by storing energy in an _electric_
>> field, and sourcing energy from that field when the voltage across
>> its terminals starts to drop (such as between charging pulses from
>> the rectifiers that charge it). So building a power-supply filter
>> with parallel capacitors (supply line to ground) and series inductors
>> (in series with the supply line) irons out ripple "coming and going."

>> The capacitors prop up the supply voltage when voltage starts to sag;
>> the inductors prop up supply _current_ when _current_ starts to sag.
>> Ripple (ac superimposed on the supply's dc output) is just a small
>> cyclical sag that we want to iron out.
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>> And BTW if we want to think of a power-supply filter as a big
>> low-pass filter, that works, too! Ripple is just a frequency
>> compoment we want not to show up superimposed on the supply's big dc
>> output signal.
>
>

26496. Re: [regenrx] OC3 base

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-26 10:55:24 UTC
From: david.newkirk@...
Topic: 26436 Message: 26496

Phil wrote:
> I've found the quality of the Chinese ceramic sockets varies widely.

Three things to watch out for:

1. They usually arrive with the pins slightly bent _in_ toward the center hole. Resist the urge to bend them further back then enough to make them stick straight up. Bend them further back--as you would with any classical socket--and the pins will tend to fall out.

2. They lack solder guards. What this means is that if you apply much more solder than that necessary to bond/weld your wire(s) and fill the pin's solder hole the solder will run down into the pin and freeze the pin's ability to open and close around the tube pin.

3. Initial installation of a tube in a new Chinese socket requires _a lot_ of force -- much more than you've ever needed to apply to an, er, onshore socket. Once I figured this out I first-time-install a dispensible tube in case a pin-to-glass seal might be overstressed. (Wear a leather glove in case the tube shatters.) _Or_ I find a thin steel rod/wire the same width as a tube pin, and use it to pre-form each of each socket's pins before I install a tube for the first time.

Best regards,

Dave
amateur radio W9BRD

26497. Re: [regenrx] how to wire an LED street light

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-26 13:35:48 UTC
From: msalbert@...
Topic: 26484 Message: 26497

According to the power supply module label it has a wide-range line input capability. So yep 120 or 240 should work fine, or anything in between.
The green/yellow wire should be connected to the case somehow, definitely for safety and possibly for shielding purposes. Looks like maybe somebody forgot to do that :-)
Curious, where did you find it? I might send the link to my towns' street department . . .. they're still screwing in mecury vapor lamps . . .

Regards,
Mark KB9VKE

26498. Re: [regenrx] How to test a power supply choke

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-26 12:58:01 UTC
From: Rob
Topic: 26436 Message: 26498

Yes... I have a 20mHz scope :
http://www.learnmorsecode.com/help/cwrelaygood.jpg
and
digital VOMs

and LC meter
http://www.learnmorsecode.com/help/bookcap4.jpg
http://www.learnmorsecode.com/help/rfcoilandferrite.html
http://www.learnmorsecode.com/help/7rfcoilandferrite.jpg

and since I never played with high power... tube power ... I am a wee bit spooked by the idea
of hooking up my expensive tools... scopes and digital meters... to 100 volts without some instruction.

On 05/26/2016 02:29 AM, J Ed jedwardsat1@... [regenrx] wrote:
>
> You can get 24g wire from ethernet cable as it's made from four
> twisted pairs. For currents under 100 mA you should be fine. To
> ensure that it doesn't suffer voltage breakdown, you could get or
> make plastic standoff pieces to ensure the wire isn't accidentally
> contacting a grounded piece of metal so insulation breakdown occurs.
>
> To test the ripple of the circuit, you need an oscilloscope and a
> capacitor to block the DC from the supply. Drawing current from your
> supply, you can measure the AC ripple from the supply. Unloaded, the
> power supply will show very little ripple.
>
> Not having a scope, you can hook it up to the radio in question and
> turn the gain up. If you hear hum at an objectionable level, more
> filtering is needed. This is a reason that direct conversion receivers
> are recommended to be run with batteries...the normally have around
> 100dB of audio gain and so the ripple needs to be reduced to a
> ridiculously low value.
>
> As for filter chokes, you need to measure their impedance while
> running a DC current through them. The inductance changes with DC in
> the coil and to properly test the choke you need to recreate it's
> operating conditions. Another thing you could do is build a power
> supply with it, measure the ripple in and ripple out, then use that to
> calculate its inductance value.
>
> Ed AE7TE
>
> On May 25, 2016 7:50 PM, "Rob roomberg@...
> <mailto:roomberg@...> [regenrx]" <regenrx@yahoogroups.com

> <mailto:regenrx@yahoogroups.com>> wrote:
>
> New 1.5H choke costs $15.
> 22 gauge wire costs $5 at WALMART.
>
> Not sure how to test unknown chokes.
> Not all the parts arrived yet to build all the power supply but I
> am curious
> how to know if I got the desired result or if this was a really
> bad idea:
>
> http://www.learnmorsecode.com/regenx/choke/index2.html
>
>
>
>
>
> On 05/22/2016 07:37 AM, david.newkirk@...
> <mailto:david.newkirk@...> [regenrx] wrote:
>
>> That's true. There's smoothing/filtering and then there's supply
>> voltage regulation. Especially if the receiver isn't a many-tube
>> superhet with AGC, the power supply load won't vary much at all
>> during operation. Even just a few henries, especially in
>> conjunction with the multi-hundred-uF caps available cheaply
>> today, will still provide very useful ripple reduction.
>>
>> To keep us all on these same page: All an inter-filter-C resistor
>> does to help filtering is slow discharge of the capacitor[s]
>> ahead of it. But using a choke--an inductor--instead does that
>> and more. The "more" is that the choke stores energy in its
>> magnetic field. Every time current through the choke starts to
>> decrease, its magnetic field collapses a little, "trying" to
>> maintain the current flow through the choke; likewise, every time
>> current through the choke starts to increase, some of that
>> increase goes into strengthening the magnetic field around the
>> choke and slowing the buildup of current through the choke. In
>> effect, the choke smooths ripple _by resisting changes in the
>> current flow through it_.
>>
>> A filter capacitor reduces ripple by storing energy in an
>> _electric_ field, and sourcing energy from that field when the
>> voltage across its terminals starts to drop (such as between
>> charging pulses from the rectifiers that charge it). So building
>> a power-supply filter with parallel capacitors (supply line to
>> ground) and series inductors (in series with the supply line)
>> irons out ripple "coming and going." The capacitors prop up the
>> supply voltage when voltage starts to sag; the inductors prop up
>> supply _current_ when _current_ starts to sag. Ripple (ac
>> superimposed on the supply's dc output) is just a small cyclical

>> sag that we want to iron out.
>>
>> And BTW if we want to think of a power-supply filter as a big
>> low-pass filter, that works, too! Ripple is just a frequency
>> compoment we want not to show up superimposed on the supply's big
>> dc output signal.
>
>

26499. Re: [regenrx] OC3 base

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-26 17:22:33 UTC
From: Rob
Topic: 26436 Message: 26499

We'll see what shows up in the mail. Thanks for the heads up on what to look for.

On 05/26/2016 06:55 AM, david.newkirk@... [regenrx] wrote:
>
> Phil wrote:
>
>
> > I've found the quality of the Chinese ceramic sockets varies widely.
>
> Three things to watch out for:
>
> 1. They usually arrive with the pins slightly bent _in_ toward the
> center hole. Resist the urge to bend them further back then enough to
> make them stick straight up. Bend them further back--as you would with
> any classical socket--and the pins will tend to fall out.
>
> 2. They lack solder guards. What this means is that if you a pply much
> more solder than that necessary to bond/weld your wire(s) and fill the
> pin's solder hole the solder will run down into the pin and freeze the
> pin's ability to open and close around the tube pin.
>
> 3. Initial installation of a tube in a new Chinese socket requires _a
> lot_ of force -- much more than you've ever needed to apply to an, er,
> onshore socket. Once I figured this out I first-time-install a
> dispensible tube in case a pin-to-glass seal might be overstressed.
> (Wear a leather glove in case the tube shatters.) _Or_ I find a thin
> steel rod/wire the same width as a tube pin, and use it to pre-form
> each of each socket's pins before I install a tube for the first time.
>
> Best regards,
>
> Dave
> amateur radio W9BRD
>
>
>

26500. Re: [regenrx] how to wire an LED street light from banggood

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-26 19:04:46 UTC
From: Rob
Topic: 26484 Message: 26500

bought at don't laugh.....
banggood.com

Seems banggood is really on the ball.
I had an item not picked out of stock and within one day got a refund
and an OUT OF STOCK email asking
me if I wanted to wait 2 weeks for re-stocked item or get a refund.

I found this same streetlight advertised by a USA company for $260.
Apparently they get those local government contracts where a hammer
costs $1,000

On 05/26/2016 09:35 AM, msalbert@... [regenrx] wrote:
>
> According to the power supply module label it has a wide-range line
> input capability. So yep 120 or 240 should work fine, or anything in
> between.
> The green/yellow wire should be connected to the case somehow,
> definitely for safety and possibly for shielding purposes. Looks like
> maybe somebody forgot to do that :-)
> Curious, where did you find it? I might send the link to my towns'
> street department . . .. they're still screwing in mecury vapor lamps
> . . .
>
> Regards,
> Mark KB9VKE
>
>

26501. Re: OC3 base

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-27 11:27:14 UTC
From: david.newkirk@...
Topic: 26436 Message: 26501

Rob wrote:

> I don't have anything that looks like this base with a keyed center pin.

So the pin numbering works as follows:

1 Just as in your photo, orient the tube/socket so its indexing key/ridge is straight up and down and you're looking at the bottom of the tube. (We always count tube pin numbering looking from the bottom.)

2 Pin 1 is the pin to the immediate lower left of the indexing ridge.

3 Count pins clockwise (starting low, sweeping up to the left, right across the top and back down to the lower right) from pin 1. (Yes, I explained what "clockwise" means. It's a term that's going away, just as did the referent for the in-joke in "This is Rip Read with the news.")

Counting pins in this way, we see that in your photo, pins 4 and 6 are absent. As others have mentioned, this is not a flaw, but its done for economy. For instance, power tubes with the same basing as the 6L6 almost always, if not always, have Pin 6 absent. It's about economy. ("Pinout" came in with integrated circuits, BTW. Tube people always said "basing. :-) But nowadays I may throw in "pinout" to see who flinches.)

4 And so the pin to the immediate lower _right_ of the indexing ridge is pin 8.

We count pin numbers the same way on all tube sockets. Only the indexing varies: In miniature tubes and magnoval tubes, there's a gap between pins 1 and 7 (or 1 and 9), and with the gap down, pin 1 is the first pin at the left side of the gap. Likewise for Compactrons (12 pins). For big old 4, 6, and 7 pin sockets, two larger pins (the filament/heater pins) are like the indexing gap, and with the big pins down the big pin on the left is pin 1. (5-pin sockets--as for the 56, 76 and 807--_had_ to be different; all their pins are the same size, with the two close-together pins [1 and 5] serving as the index.)

You don't have to wait until your tube sockets arrive to start using your 0C3, BTW. Octal pins are spaced far enough apart so you can clamp a small alligator or crocodile clip down on one (preferably axially) without short circuiting to adjacent pins. Lay the tube on its side, maybe on a cardboard pad, secure it to the chassis with a strip or two masking tape, and connect to it with the clips. As long as you won't be doing Immelmann turns or barrel rolls with your radio bench, this will be fine until you can socket the tube properly. (Not all tubes will tolerate lying on their sides during operation--tube manuals will tattle on which ones don't--but VR tubes will work fine in any position.)

Temporary alligator-clip connections are easy for a voltage-regulator (VR) tube like the 0C3, because you have only two connections to make to it: Assuming that the negative output terminal of your supply is the same as chassis/ground/common, Pin 2 (cathode) goes to circuit common/ground/chassis and Pin 5 (anode) connects to your power-supply positive

terminal via a dropping/current-limiting resistor of the appropriate value. And then whatever you want to power from the voltage regulated by the 0C3 also connects to the 0C3's anode/plate pin (pin 5).

Fun fact: Pins 2 and 5 on _miniature_ VR tubes correspond. So once you learn "5 to positive, 2 to ground" you know all you need to know about the basic connections for octal and 7-pin-miniature VR tubes.

Fun hint: Don't directly shunt a VR tube with more than 0.1 uF, otherwise you will likely build a very slow relaxation oscillator. VR datasheets usually mention this.

Best regards,

Dave
amateur radio W9BRD

26502. Re: [regenrx] Re: OC3 base

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-27 18:04:27 UTC
From: Rob
Topic: 26436 Message: 26502

cool
got it
thankyou

http://www.learnmorsecode.com/regenx/choke/0C3base.jpg
http://www.learnmorsecode.com/regenx/choke/index.html

On 05/27/2016 07:27 AM, david.newkirk@... [regenrx] wrote:
>
> Rob wrote:
>
>
> > I don't have anything that looks like this base with a keyed center pin.
>
> So the pin numbering works as follows:
>
> 1 Just as in your photo, orient the tube/socket so its indexing
> key/ridge is straight up and down and you're looking at the bottom of
> the tube. (We always count tube pin numbering looking from the bottom.)
>
> 2 Pin 1 is the pin to the immediate lower left of the indexing ridge.
>
> 3 Count pins clockwise (starting low, sweeping up to the left, right
> across the top and back down to the lower right) from pin 1. (Yes, I
> explained what "clockwise" means. It's a term that's going away, just
> as did the referent for the in-joke in & quot;This is Rip Read with
> the news.")
>
> Counting pins in this way, we see that in your photo, pins 4 and 6 are
> absent. As others have mentioned, this is not a flaw, but its done for
> economy. For instance, power tubes with the same basing as the 6L6
> almost always, if not always, have Pin 6 absent. It's about economy.
> ("Pinout" came in with integrated circuits, BTW. Tube people always
> said "basing. :-) But nowadays I may throw in "pinout" to see who
> flinches.)
>
> 4 And so the pin to the immediate lower _right_ of the indexing ridge
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>
> We count pin numbers the same way on all tube sockets. Only the
> indexing varies: In miniature tubes and magnoval tubes, there's a gap
> between pins 1 and 7 (or 1 and 9), and with the gap down, pin 1 is the
> first pin at the left side of the gap. Likewise for Compactrons (12
> pins). For big old 4, 6, and 7 pin sockets, two larger pins (the
> filament/heater pins) are like the indexing gap, and with the big pins

> down the big pin on the left is pin 1. (5-pin sockets--as for the 56,
> 76 and 807--_had_ to be different; all their pins are the same size,
> with the two close-together pins [1 and 5] serving as the index.)
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> You don't have to wait until your tube sockets arrive to start using
> your 0C3, BTW. Octal pins are spaced far enough apart so you can clamp
> a small alligator or crocodile clip down on one (preferably axially)
> without short circuiting to adjacent pins. Lay the tube on its side,
> maybe on a cardboard pad, secure it to the chassis with a strip or two
> masking tape, and connect to it with the clips. As long as you won't
> be doing Immelmann turns or barrel rolls with your radio bench, this
> will be fine until you can socket the tube properly. (Not all tubes
> will tolerate lying on their sides during operation--tube manuals will
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>
> Temporary alligator-clip connections are easy for a voltage-regulator
> (VR) tube like the 0C3, because you have only two connections to make
> to it: Assuming that the negative output terminal of your supply is
> the same as chassis/ground/common, Pin 2 (cathode) goes to circuit
> common/ground/chassis and Pin 5 (anode) connects to your power-supply
> positive terminal via a dropping/current-limiting resistor of the
> appropriate value. And then whatever you want to power from the
> voltage regulated by the 0C3 also connects to the 0C3's anode/plate
> pin (pin 5).
>
> Fun fact: Pins 2 and 5 on _miniature_ VR tubes correspond. So once you
> learn "5 to positive, 2 to ground" you know all you need to know about
> the basic connections for octal and 7-pin-miniature VR tubes.
>
> Fun hint: Don't directly shunt a VR tube with more than 0.1 uF,
> otherwise you will likely build a very slow relaxation oscillator. VR
> datasheets usually mention this.
>
> Best regards,
>
> Dave
> amateur radio W9BRD
>

26503. Why are there internal connections between unused pins

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-27 18:14:09 UTC
From: Rob
Topic: 26436 Message: 26503

The 0C3 has an internal connection from pin 3 to pin 7 with no function inside the tube.
The datasheet says its a jumper to use in case the tube is removed. How would you do anything with those pins
in a circuit?

http://www.learnmorsecode.com/regenx/choke/0C3a.jpg

26505. FS: Original Gonset G76 Manual

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-27 19:52:38 UTC
From: Bry Carling
Topic: 26505 Message: 26505

FOR SALE: Original Gonset G76 Manual

Excellent Condition.

Available for $25.00 plus shipping.
Please reply of the list!

73 - Bry Carling. AF4K

af4k@...

26507. Walmart wire home brew choke is 1.5mH

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-28 04:38:07 UTC
From: Rob
Topic: 26507 Message: 26507

The mission was to hand wind a 2H power supply choke.
The experiment started with just winging it by stacking steel plates in a
2 inch toroid shape then wind as much wire as would fit in one layer.
Since the wire comes in 4 foot spools I figured I would make taps.
I chose 22 gauge wire because I thought a thinner wire would burn up
like a fuse.
Perhaps that was a bad idea because the result was definitely 1.5 mH
which is a
thousand times smaller than the desired result of 2H.

http://www.learnmorsecode.com/regenx/choke/index.html

But it was a good way to determine if $5 of craft wire would make an
inductor.

How thin is the wire inside a real 2H choke?

http://www.learnmorsecode.com/regenx/choke/2hchoke.jpg

26508. Re: [regenrx] Walmart wire home brew choke is 1.5mH

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-28 06:52:22 UTC
From: J Ed
Topic: 26507 Message: 26508

It depends.

Toroids aren't as tolerant of DC current. Most chokes are made of an EI core with a thin layer of insulating material between the E and I sections. This lets the core tolerate a DC current without losing its magnetic ability.

You could build a small choke using 30g wire (or smaller) and reach 2H quite easily. The thin wire will also heat up with a low DC current, meaning you'll lose power and endanger the wire. Find out what current is the maximum for your gauge of wire as used in power transmission. Then use 50-75% of that value.

If your choke measures 2H on an LC meter, it will display less inductance after being used in a circuit. Even with the "air" gap, DC current is going to weaken the magnetic power of the core. Shoot for a higher value so you can be sure to have some wiggle room.

22g craft wire isn't a bad choice for inductors, just not ones with iron cores that might heat up 60-80 degrees.

You'll soon learn why filter chokes are somewhat popular with tube circuits but hardly such with transistor circuits. If you want to try again, smash a cheap DC power brick and steal laminations and wire from the transformer.

Ed AE7TE
On May 27, 2016 9:38 PM, "Rob roomberg@... [regenrx]" <
regenrx@yahoogroups.com> wrote:

> The mission was to hand wind a 2H power supply choke.
> The experiment started with just winging it by stacking steel plates in a
> 2 inch toroid shape then wind as much wire as would fit in one layer.
> Since the wire comes in 4 foot spools I figured I would make taps.
> I chose 22 gauge wire because I thought a thinner wire would burn up
> like a fuse.
> Perhaps that was a bad idea because the result was definitely 1.5 mH
> which is a
> thousand times smaller than the desired result of 2H.
>
> http://www.learnmorsecode.com/regenx/choke/index.html
>
> But it was a good way to determine if $5 of craft wire would make an
> inductor.
>
> How thin is the wire inside a real 2H choke?
>
> http://www.learnmorsecode.com/regenx/choke/2hchoke.jpg

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> "In the interest of Regenerating radio's lost art of Regeneration"
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> Yahoo Groups Links
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26509. Re: Walmart wire home brew choke is 1.5mH

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-28 12:20:29 UTC
From: david.newkirk@...
Topic: 26507 Message: 26509

Rob wrote:

> How thin is the wire inside a real 2H choke?

Based on Ed's suggestion that your choke's operating current should be no more than 50% to 75% of the current-handling capability of the wire, you could make an educated guess about this by finding the current spec for a given choke and then doing a little arithmetic in consultation with a "copper wire table" that lists current capacity v wire gauge.

There's a reason why high-inductance filter chokes capable of hundreds of mA of operating current are big, heavy, and expensive. :-)

Best regards,

Dave
amateur radio W9BRD

26510. Re: [regenrx] Walmart wire home brew choke is 1.5mH

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-28 14:59:32 UTC
From: Richard
Topic: 26507 Message: 26510

Well, inductance is proportional to turns squared, so; L = k n? where k
is a constant for that core configuration. 2 Hy. requires 4385 turns.

As noted, for a filter choke you need an air gap to resist saturation,
so a toroidal core is not recommended.

Wire ampacity is related to heat loss, and the free air rating is much
higher than when insulated or in a transformer or choke coil. Your 22
AWG wire is probably good for an Amp or two.

Richard, AA1P

On 05/28/2016 12:38 AM, Rob roomberg@... [regenrx] wrote:
> The mission was to hand wind a 2H power supply choke.
> The experiment started with just winging it by stacking steel plates in a
> 2 inch toroid shape then wind as much wire as would fit in one layer.
> Since the wire comes in 4 foot spools I figured I would make taps.
> I chose 22 gauge wire because I thought a thinner wire would burn up
> like a fuse.
> Perhaps that was a bad idea because the result was definitely 1.5 mH
> which is a
> thousand times smaller than the desired result of 2H.
>
> http://www.learnmorsecode.com/regenx/choke/index.html
>
> But it was a good way to determine if $5 of craft wire would make an
> inductor.
>
> How thin is the wire inside a real 2H choke?
>
> http://www.learnmorsecode.com/regenx/choke/2hchoke.jpg
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26511. Re: [regenrx] Walmart wire home brew choke is 1.5mH

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-28 15:34:04 UTC
From: Rob
Topic: 26507 Message: 26511

Thank you for all the details.
The goal was to determine if a power ripple choke could be added to the caveman science home brew list...
http://www.learnmorsecode.com/regen/index.html

Note my construction method was to alternate where the gap in the strip of metal was in the toroid:
http://www.learnmorsecode.com/regenx/choke/choke01.jpg
and
each strip of metal is wrapped with KAPTON tape
and is definitely insulated from each layer.... lamination.

I thought toroid transformers were harder to wind and that was why EI lamination was the age old standard.
A core bobbin could be wound on a lathe then installed in the EI laminations.

On 05/28/2016 02:52 AM, J Ed jedwardsat1@... [regenrx] wrote:
>
> It depends.
>
> Toroids aren't as tolerant of DC current. Most chokes are made of an
> EI core with a thin layer of insulating material between the E and I
> sections. This lets the core tolerate a DC current without losing its
> magnetic ability.
>
> You could build a small choke using 30g wire (or smaller) and reach 2H
> quite easily. The thin wire will also heat up with a low DC current,
> meaning you'll lose power and endanger the wire. Find out what current
> is the maximum for your gauge of wire as used in power transmission.
> Then use 50-75% of that value.
>
> If your choke measures 2H on an LC meter, it will display less
> inductance after being used in a circuit. Even with the "air" gap, DC
> current is going to weaken the magnetic power of the core. Shoot for a
> higher value so you can be sure to have some wiggle room.
>
> 22g craft wire isn't a bad choice for inductors, just not ones with
> iron cores that might heat up 60-80 degrees.
>
> You'll soon learn why filter chokes are somewhat popular with tube
> circuits but hardly such with transistor circuits. If you want to try
> again, smash a cheap DC power brick and steal laminations and wire
> from the transformer.
>
> Ed AE7TE

>
> On May 27, 2016 9:38 PM, "Rob roomberg@...
> <mailto:roomberg@...> [regenrx]" <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>> wrote:
>
> The mission was to hand wind a 2H power supply choke.
> The experiment started with just winging it by stacking steel
> plates in a
> 2 inch toroid shape then wind as much wire as would fit in one layer.
> Since the wire comes in 4 foot spools I figured I would make taps.
> I chose 22 gauge wire because I thought a thinner wire would burn up
> like a fuse.
> Perhaps that was a bad idea because the result was definitely 1.5 mH
> which is a
> thousand times smaller than the desired result of 2H.
>
> http://www.learnmorsecode.com/regenx/choke/index.html
>
> But it was a good way to determine if $5 of craft wire would make an
> inductor.
>
> How thin is the wire inside a real 2H choke?
>
> http://www.learnmorsecode.com/regenx/choke/2hchoke.jpg
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> <mailto:regenrx-fullfeatured@yahoogroups.com>
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26512. Re: [regenrx] Re: Walmart wire home brew choke is 1.5mH

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-28 15:37:00 UTC
From: Rob
Topic: 26507 Message: 26512

I'm OK with BIG and HEAVY
I just was considering how to make it work in a toroid shape...because a
2 inch inside diameter can easily be hand wound.

On 05/28/2016 08:20 AM, david.newkirk@... [regenrx] wrote:
>
> Rob wrote:
>
>
> > How thin is the wire inside a real 2H choke?
>
> Based on Ed's suggestion that your choke's operating current should be
> no more than 50% to 75% of the current-handling capability of the
> wire, you could make an educated guess about this by finding the
> current spec for a given choke and then doing a little arithmetic in
> consultation with a "copper wire table" that lists current capacity v
> wire gauge.
>
> There's a reason why high-inductance filter chokes capable of hundreds
> of mA of operating current are big, heavy, and expensive. :-)
>
> Best regards,
>
> Dave
> amateur radio W9BRD
>

26513. Re: [regenrx] Re: Walmart wire home brew choke is 1.5mH

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-28 16:49:31 UTC
From: J Ed
Topic: 26507 Message: 26513

If you want to make a toroid, you need to make it mostly iron laminates. Say you get large, "o" shaped pieces of iron. Varnish them and glue them together somehow (dipping the whole mess in varnish should work). Then take a saw or angle grinder and cut a single gap in the ring of iron laminations. This is your air gap. Put a non conductive material in here (phenolic would be pretty good. Don't use plastic in case your inductor heats up.) The important part is that, while you cement the insulating material into the gap, you need to clamp the choke so there is pressure on the gap. This will affect the magnetism in the core.

The wire current ratings are the current at which a wire, in a bundle of like wires, heats up to a certain temperature. You don't want the choke to heat up much, so I suggested 50-75% of current rating to keep it cool. After it's wound, dip it in a pot of varnish two or three times to prevent intrusion of moisture and insects. The thing will last longer this way.

Another thing...scramble winding the wires will result in a lower inductance than if you lay the wire side by side in neat rows. This is unwanted at RF but we're working at DC now.

Ed AE7TE
On May 28, 2016 8:37 AM, "Rob roomberg@... [regenrx]" <
regenrx@yahoogroups.com> wrote:

>
>
> I'm OK with BIG and HEAVY
> I just was considering how to make it work in a toroid shape...because a 2
> inch inside diameter can easily be hand wound.
>
>
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>
> On 05/28/2016 08:20 AM, david.newkirk@... [regenrx] wrote:
>
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>
> Rob wrote:
>
> > How thin is the wire inside a real 2H choke?
>
> Based on Ed's suggestion that your choke's operating current should be no
> more than 50% to 75% of the current-handling capability of the wire, you
> could make an educated guess about this by finding the current spec for a
> given choke and then doing a little arithmetic in consultation with a
> "copper wire table" that lists current capacity v wire gauge.

>
> There's a reason why high-inductance filter chokes capable of hundreds of
> mA of operating current are big, heavy, and expensive. :-)
>
> Best regards,
>
> Dave
> amateur radio W9BRD
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>
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26514. Re: [regenrx] Re: Walmart wire home brew choke is 1.5mH scramble or not scramble

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-28 17:21:20 UTC
From: Rob
Topic: 26507 Message: 26514

I'm confused by this statement:

On 05/28/2016 12:49 PM, J Ed jedwardsat1@... [regenrx] wrote:
> Another thing...scramble winding the wires will result in a lower
> inductance than if you lay the wire side by side in neat rows. This is
> unwanted at RF but we're working at DC now.

So... DO scramble wind or do NOT scramble wind for DC ripple flattening
choking ?

26515. Re: [regenrx] Walmart wire home brew choke is 1.5mH

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-28 17:26:14 UTC
From: Leonard Meek
Topic: 26507 Message: 26515

I think winding your own choke would be rather time consuming, with unpredictable results, unless you're a young guy with nothing else to do. There are plenty of chokes on the market, not real cheap but reliable. I've also used small fluorescent lamp ballasts with some success. Don't spend all your time winding chokes, and get down to building your radio. It's more fun.

Leonard

----- Original Message -----
From: "Rob roomberg@... [regenrx]" <regenrx@yahoogroups.com>
To: "QRP-L Mailing List" <qrp-l@...>
Sent: Friday, May 27, 2016 6:38 PM
Subject: [regenrx] Walmart wire home brew choke is 1.5mH

> The mission was to hand wind a 2H power supply choke.
> The experiment started with just winging it by stacking steel plates in a
> 2 inch toroid shape then wind as much wire as would fit in one layer.
> Since the wire comes in 4 foot spools I figured I would make taps.
> I chose 22 gauge wire because I thought a thinner wire would burn up
> like a fuse.
> Perhaps that was a bad idea because the result was definitely 1.5 mH
> which is a
> thousand times smaller than the desired result of 2H.
>
> http://www.learnmorsecode.com/regenx/choke/index.html
>
> But it was a good way to determine if $5 of craft wire would make an
> inductor.
>
> How thin is the wire inside a real 2H choke?
>
> http://www.learnmorsecode.com/regenx/choke/2hchoke.jpg
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26516. Re: [regenrx] Re: Walmart wire home brew choke is 1.5mH scramble or not scramble

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-28 18:13:27 UTC
From: J Ed
Topic: 26507 Message: 26516

Don't. If you wanted a coil for 2 MHZ, scramble winding would make more sense. To remove low frequency signals from your DC, wind the wire in nice even layers. That will allow more inductance and let you get more wire in the tiny little core window.

I'm confused by this statement:

On 05/28/2016 12:49 PM, J Ed jedwardsat1@... [regenrx] wrote:
> Another thing...scramble winding the wires will result in a lower
> inductance than if you lay the wire side by side in neat rows. This is
> unwanted at RF but we're working at DC now.

So... DO scramble wind or do NOT scramble wind for DC ripple flattening choking ?

26517. Re: [regenrx] Re: Walmart wire home brew choke is 1.5mH scramble or not scramble

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-28 18:21:40 UTC
From: Michael
Topic: 26507 Message: 26517

Should it not be feasible to use the primary winding of a
mains or audio output transformer? If so, what kind of
transformer would perform better than a chunky resistor?

Michael
8339

On 28.05.16 19:13, J Ed jedwardsat1@... [regenrx] wrote:
>
>
> Don't. If you wanted a coil for 2 MHZ, scramble winding would make more
> sense. To remove low frequency signals from your DC, wind the wire in
> nice even layers. That will allow more inductance and let you get more
> wire in the tiny little core window.
>
> --
>
>
> I'm confused by this statement:
>
> On 05/28/2016 12:49 PM, J Ed jedwardsat1@...
> <mailto:jedwardsat1@...> [regenrx] wrote:
>> Another thing...scramble winding the wires will result in a lower
>> inductance than if you lay the wire side by side in neat rows. This is
>> unwanted at RF but we're working at DC now.
>
> So... DO scramble wind or do NOT scramble wind for DC ripple flattening
> choking ?
>

26518. Re: [regenrx] Re: Walmart wire home brew choke is 1.5mH scramble or not scramble

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-28 19:09:13 UTC
From: J Ed
Topic: 26507 Message: 26518

An SE audio transformer should work well, as they are gapped for primary current. A power transformer would need to be modified to tolerate such current. The secondary, left open, would pose no problem but would take up room that could be used for more primary wire.

Ed AE7TE
On May 28, 2016 11:20 AM, "Michael michael.setaazul@... [regenrx]" <regenrx@yahoogroups.com> wrote:

>
>
>
> Should it not be feasible to use the primary winding of a
> mains or audio output transformer? If so, what kind of
> transformer would perform better than a chunky resistor?
>
> Michael
> 8339
>
> On 28.05.16 19:13, J Ed jedwardsat1@... [regenrx] wrote:
> >
> >
> > Don't. If you wanted a coil for 2 MHZ, scramble winding would make more
> > sense. To remove low frequency signals from your DC, wind the wire in
> > nice even layers. That will allow more inductance and let you get more
> > wire in the tiny little core window.
> >
> > __
> >
> >
> > I'm confused by this statement:
> >
> > On 05/28/2016 12:49 PM, J Ed jedwardsat1@...
> > <mailto:jedwardsat1@...> [regenrx] wrote:
> >> Another thing...scramble winding the wires will result in a lower
> >> inductance than if you lay the wire side by side in neat rows. This is
> >> unwanted at RF but we're working at DC now.
> >
> > So... DO scramble wind or do NOT scramble wind for DC ripple flattening
> > choking ?
> >
>
>

26519. Re: [regenrx] Re: Walmart wire home brew choke is 1.5mH scramble or not scramble

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-28 19:12:58 UTC
From: Leonard Meek
Topic: 26507 Message: 26519

You could connect primary & secondary in series (properly phased) for a little more inductance, but not much DC handling ability.
----- Original Message -----
From: J Ed jedwardsat1@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Saturday, May 28, 2016 9:09 AM
Subject: Re: [regenrx] Re: Walmart wire home brew choke is 1.5mH scramble or not scramble

An SE audio transformer should work well, as they are gapped for primary current. A power transformer would need to be modified to tolerate such current. The secondary, left open, would pose no problem but would take up room that could be used for more primary wire.

Ed AE7TE

On May 28, 2016 11:20 AM, "Michael michael.setaazul@... [regenrx]"
<regenrx@yahoogroups.com> wrote:

Should it not be feasible to use the primary winding of a
mains or audio output transformer? If so, what kind of
transformer would perform better than a chunky resistor?

Michael
8339

On 28.05.16 19:13, J Ed jedwardsat1@... [regenrx] wrote:
>
>
> Don't. If you wanted a coil for 2 MHZ, scramble winding would make more
> sense. To remove low frequency signals from your DC, wind the wire in
> nice even layers. That will allow more inductance and let you get more
> wire in the tiny little core window.
>
> --
>
>
> I'm confused by this statement:
>
> On 05/28/2016 12:49 PM, J Ed jedwardsat1@...
> <mailto:jedwardsat1@...m> [regenrx] wrote:
>> Another thing...scramble winding the wires will result in a lower
>> inductance than if you lay the wire side by side in neat rows. This is
>> unwanted at RF but we're working at DC now.
>
> So... DO scramble wind or do NOT scramble wind for DC ripple flattening
> choking ?

>

26520. 1.5mH scramble or not scramble ... SINGLE ENDED AUDIO transformer

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-29 01:53:42 UTC
From: Rob
Topic: 26507 Message: 26520

Very interesting discussion here.
This is a single ended audio transformer from tubesandmore.com

....and it shows that the primary is good for 6V6,6AQ5/A plate voltage.....
so I figure it would be happy for power supply ripple smoothing to those
same tubes :
cost $14
https://www.tubesandmore.com/products/P-T31

noting that a real 1.5 H choke costs $15
https://www.tubesandmore.com/products/P-T156R

so if you want the real thing its pretty much nearly the same cost
BUT
IF you were not buying chokes and just building with on hand parts......
and I do have that audio transformer in my parts stash.......
it was good to learn that transformer COULD be used to build the power
supply ripple filter.

On 05/28/2016 03:12 PM, 'Leonard Meek' lemeek@... [regenrx]
wrote:
>
> □
>
> You could connect primary & secondary in series (properly phased) for
> a little more inductance, but not much DC handling ability.
>
> ----- Original Message -----
> *From:* J Ed jedwardsat1@... [regenrx]
> <mailto:jedwardsat1@...%20[regenrx]>
> *To:* regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>
> *Sent:* Saturday, May 28, 2016 9:09 AM
> *Subject:* Re: [regenrx] Re: Walmart wire home brew choke is 1.5mH
> scramble or not scramble
>
> An SE audio transformer should work well, as they are gapped for
> primary current. A power transformer would need to be modified to
> tolerate such current. The secondary, left open, would pose no
> problem but would take up room that could be used for more primary
> wire.
>
> Ed AE7TE
>
> On May 28, 2016 11:20 AM, "Michael
> michael.setaazul@...

> <mailto:michael.setaazul@...> [regenrx]"
> <regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>> wrote:
>
>
> Should it not be feasible to use the primary winding of a
> mains or audio output transformer? If so, what kind of
> transformer would perform better than a chunky resistor?
>
> Michael
> 8339
>
> On 28.05.16 19:13, J Ed jedwardsat1@...
> <mailto:jedwardsat1@...> [regenrx] wrote:
> >
> >
> > Don't. If you wanted a coil for 2 MHZ, scramble winding
> would make more
> > sense. To remove low frequency signals from your DC, wind
> the wire in
> > nice even layers. That will allow more inductance and let
> you get more
> > wire in the tiny little core window.
> >
> > __
> >
> >
> > I'm confused by this statement:
> >
> > On 05/28/2016 12:49 PM, J Ed jedwardsat1@...
> <mailto:jedwardsat1@...>
> > <mailto:jedwardsat1@...
> <mailto:jedwardsat1@...>> [regenrx] wrote:
> >> Another thing...scramble winding the wires will result in a
> lower
> >> inductance than if you lay the wire side by side in neat
> rows. This is
> >> unwanted at RF but we're working at DC now.
> >
> > So... DO scramble wind or do NOT scramble wind for DC ripple
> flattening
> > choking ?
> >
>
>

26521. winding your own choke would be rather time consuming

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-29 02:32:59 UTC
From: Rob
Topic: 26507 Message: 26521

I'm not a young man.
But I am VP of the local radio club so as the staff tinkerer I get to play like Edison and Tesla.
This particular toroid choke fail just showed how to NOT make a 2H choke.
But it definitely did show how to make a 1.5mH choke.

We had a bonfire a week ago.
I noticed the charcoal left in the fire pit yesterday....so... just for giggles I ground up some of that charcoal in a
coffee bean grinder. It made an extremely fine black dust.
So now I am contemplating what goop to mix that dust with to make a resistor.
AND
I am contemplating how to bag this carbon dust to make a telephone
...old time telephone.. microphone.

15 years ago......I did a Mr Wizard type of "Science of Radio" show at the Franklin Institute Science Museum on Friday
nights for two years. I did six 45 minute shows from 6PM until midnight for 800 kids that
slept on the floor....a gig called CAMP IN. It was one heck of show. I also did it on the road for schools and scouts.

I would always show and tell all modes of ham operation from spark gap to SSTV and often parents would say this
is a rich man's hobby.
And in tough times..... young parents didn't have a lot of spare cash to blow on a hobby.
So I made sure I always did show and tell home brew QRP rigs and the real caveman science
crystal radios..... just to show them that a handful of parts, not real expensive parts, could get you started in the hobby of electronics and ham radio.

So when I go down this path of tinkering with making ANY component from scratch......
its not that I need to replicate something from 1930.
I am just trying to learn how to make something from scratch so I can teach the kids..and parents...
that there is more to this hobby of electronics than buying penny transistors from China.
There is an actual science of creating working components ....
yourself.... with readily available materials.

I have on hand right now every component required to build every transistor radio in a few hundred publications.....

ranging from the simplest germanium diode with a germanium PNP circuit
or AM radio TA7642 IC or 7.16resonator based regens... to any flavor of
NE602 rigs...

BUT
I'm not building radios to sell. I wanted to learn HOW they work
first.... the kit the components for scouts.
So winding a 2H choke to flatten ripple into an 0C3 103 volt regulator tube
has really been very educational for me.
Definitely learning more than the paint by numbers transistors circuits
I built over the years.

On 05/28/2016 01:26 PM, 'Leonard Meek' lemeek@... [regenrx]
wrote:
> I think winding your own choke would be rather time consuming, with
> unpredictable results, unless you're a young guy with nothing else to do.
> There are plenty of chokes on the market, not real cheap but reliable. I've
> also used small fluorescent lamp ballasts with some success. Don't spend all
> your time winding chokes, and get down to building your radio. It's more
> fun.
>
> Leonard
>
> ----- Original Message -----
> From: "Rob roomberg@... [regenrx]" <regenrx@yahoogroups.com>
> To: "QRP-L Mailing List" <qrp-l@...>
> Sent: Friday, May 27, 2016 6:38 PM
> Subject: [regenrx] Walmart wire home brew choke is 1.5mH
>
>
>> The mission was to hand wind a 2H power supply choke.
>> The experiment started with just winging it by stacking steel plates in a
>> 2 inch toroid shape then wind as much wire as would fit in one layer.
>> Since the wire comes in 4 foot spools I figured I would make taps.
>> I chose 22 gauge wire because I thought a thinner wire would burn up
>> like a fuse.
>> Perhaps that was a bad idea because the result was definitely 1.5 mH
>> which is a
>> thousand times smaller than the desired result of 2H.
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>> http://www.learnmorsecode.com/regenx/choke/index.html
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>> But it was a good way to determine if $5 of craft wire would make an
>> inductor.
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>> How thin is the wire inside a real 2H choke?
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>> http://www.learnmorsecode.com/regenx/choke/2hchoke.jpg
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26522. Re: [regenrx] winding your own choke would be rather time consuming

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-29 02:55:04 UTC
From: Jim Wiley
Topic: 26507 Message: 26522

Rob, Leonard, et. al - -

Get yourself a copy of Alfred P Morgan's "The Boy Electrician", wherein he shows you how to build carbon microphones, dry cell and wet cell batteries, a small dynamo to charge them, telegraph keys and sounders, meters, a crystal set receiver (of course), a regenerative receiver, rheostats, rotary switches, transformers, motors, capacitors, basic test equipment, and all sorts of other electrical and electronic parts.

First written in 1915, and updated frequently, the book is long out of print, but used copies are readily available.

An extremely valuable resource, written for the young person with a set of basic hand tools, some imagination, and no money. I have built several of projects and all of them worked, some better than others. You won't be sorry to have this book, and I credit this book for sparking my interest in ham radio and electronics.

Morgan also has several other books of a similar vein. The newer books have titles like "The Boy's First (followed by the Second, Third, Fourth, etc.) Book of Radio and Electronics",

- Jim, KL7CC

On 5/28/2016 6:32 PM, Rob roomberg@... [regenrx] wrote:
> I'm not a young man.
> But I am VP of the local radio club so as the staff tinkerer I get to
> play like Edison and Tesla.
> This particular toroid choke fail just showed how to NOT make a 2H choke.
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> also did it on the road for schools and scouts.
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> transistors from China.
> There is an actual science of creating working components ....
> yourself.... with readily available materials.
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> I have on hand right now every component required to build every
> transistor radio in a few hundred publications.....
> ranging from the simplest germanium diode with a germanium PNP circuit
> or AM radio TA7642 IC or 7.16resonator based regens... to any flavor of
> NE602 rigs...
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> BUT
> I'm not building radios to sell. I wanted to learn HOW they work
> first.... the kit the components for scouts.
> So winding a 2H choke to flatten ripple into an 0C3 103 volt regulator tube
> has really been very educational for me.
> Definitely learning more than the paint by numbers transistors circuits
> I built over the years.
>
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> On 05/28/2016 01:26 PM, 'Leonard Meek' lemeek@... [regenrx]
> wrote:
>> I think winding your own choke would be rather time consuming, with
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>> There are plenty of chokes on the market, not real cheap but reliable. I've
>> also used small fluorescent lamp ballasts with some success. Don't spend all
>> your time winding chokes, and get down to building your radio. It's more
>> fun.
>>
>> Leonard

>>
>> ----- Original Message -----
>> From: "Rob roomberg@... [regenrx]" <regenrx@yahoogroups.com>
>> To: "QRP-L Mailing List" <qrp-l@...>
>> Sent: Friday, May 27, 2016 6:38 PM
>> Subject: [regenrx] Walmart wire home brew choke is 1.5mH
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26523. Re: [regenrx] winding your own choke would be rather time consuming

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-29 03:29:11 UTC
From: Tom Lee
Topic: 26507 Message: 26523

Since the early edition(s) are out of copyright, legal scans have begun
to appear: www.tayloredge.com/museum/museum/TheBoyElectrician.pdf being
one example.

Morgan's books were important to a lot of us, I imagine. I checked out
the one copy available at my neighborhood library so often that the
librarians used to tease me about not reading anything else.

--Cheers,
Tom

--
Prof. Thomas H. Lee
Allen Bldg. Rm.205
420 Via Palou Mall
Stanford University
Stanford, CA 94305-4070
http://www-smirc.stanford.edu

On 5/28/2016 7:55 PM, Jim Wiley jwiley@... [regenrx] wrote:
> Rob, Leonard, et. al - -
>
> Get yourself a copy of Alfred P Morgan's "The Boy Electrician", wherein
> he shows you how to build carbon microphones, dry cell and wet cell
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>>> Leonard
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>>> ----- Original Message -----
>>> From: "Rob roomberg@... [regenrx]" <regenrx@yahoogroups.com>
>>> To: "QRP-L Mailing List" <qrp-l@...>
>>> Sent: Friday, May 27, 2016 6:38 PM
>>> Subject: [regenrx] Walmart wire home brew choke is 1.5mH
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>>>> The mission was to hand wind a 2H power supply choke.
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26524. Re: [regenrx] winding your own choke would be rather time consuming

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-29 04:38:03 UTC
From: Leonard Meek
Topic: 26507 Message: 26524

Rob, that puts a whole different light on the subject. Lindsay put out a set of booklets entitled "The Impoverished Radio Experimenter." Ben Tongue (of Blonder-Tongue) put out dozens of articles on crystal sets, some quite detailed. If you can find any of the Alfred P. Morgan books (The Boy Electrician for example) you'll find articles on winding transformers and making many of the components for your radios. One major problem with the old DIY books is that many of the materials required are no longer available or are considered toxic or hazardous. Anyhow, good luck with your projects.

Leonard

----- Original Message -----
From: "Rob roomberg@... [regenrx]" <regenrx@yahoogroups.com>
To: <regenrx@yahoogroups.com>
Sent: Saturday, May 28, 2016 4:32 PM
Subject: [regenrx] winding your own choke would be rather time consuming

> I'm not a young man.
> But I am VP of the local radio club so as the staff tinkerer I get to
> play like Edison and Tesla.
> This particular toroid choke fail just showed how to NOT make a 2H choke.
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>> Leonard
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>> ----- Original Message -----
>> From: "Rob roomberg@... [regenrx]" <regenrx@yahoogroups.com>
>> To: "QRP-L Mailing List" <qrp-l@...>
>> Sent: Friday, May 27, 2016 6:38 PM

>> Subject: [regenrx] Walmart wire home brew choke is 1.5mH
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>>> The mission was to hand wind a 2H power supply choke.
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26525. Re: [regenrx] winding your own choke would be rather time consuming

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-29 04:43:56 UTC
From: Tom Lee
Topic: 26507 Message: 26525

Hi Rob,

Wonderful that you shared your skills with a generation of youngsters.
I'm sure that you inspired quite a few kids!

As to what goop might be useful for your bonfire ash experiments, I have
used Purell as a carrier for graphite dust to make conductive paint
(poor man's aquadag) to repair keyboards and such. It might be worth
including as a candidate for your experiments.

--Cheers,
Tom

--
Prof. Thomas H. Lee
Allen Bldg. Rm.205
420 Via Palou Mall
Stanford University
Stanford, CA 94305-4070
http://www-smirc.stanford.edu

On 5/28/2016 7:32 PM, Rob roomberg@... [regenrx] wrote:
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>> ----- Original Message -----
>> From: "Rob roomberg@... [regenrx]" <regenrx@yahoogroups.com>

>> To: "QRP-L Mailing List" <qrp-l@...>
>> Sent: Friday, May 27, 2016 6:38 PM
>> Subject: [regenrx] Walmart wire home brew choke is 1.5mH
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26526. winding your own choke would be rather time consuming BOY

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-29 11:07:40 UTC
From: Rob
Topic: 26507 Message: 26526

YES... I love that book BOY ELECTRICIAN
but
the online PDF.. which I do have from
http://www.tayloredge.com/museum/museum/TheBoyElectrician.pdf

Is too light to read and if I enhance the image I lose the detail in the
drawings...
see here:
http://www.learnmorsecode.com/boy/index.html

It there any way to get a this to be readable...both text and images?

And.....
definitely a bitch to find the toxic raw materials to build the Lindsey
books
archive of batteries.

I do have some of the Impoverished Radio experimenter.....
and some Ben Tongue.

Arnie said there was a Ben Tongue QUADRUPLER DIODE radio in SPRAT but we
can't seem
to find that schematic. Anyone got that circuit to share?

==========
Rob, that puts a whole different light on the subject. Lindsay put out a
set
of booklets entitled "The Impoverished Radio Experimenter." Ben Tongue (of
Blonder-Tongue) put out dozens of articles on crystal sets, some quite
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>>
>> - Jim, KL7CC
>>
>>
>> On 5/28/2016 6:32 PM, Robroomberg@... [regenrx] wrote:
>>> I'm not a young man.
>>> But I am VP of the local radio club so as the staff tinkerer I get to
>>> play like Edison and Tesla.
>>> This particular toroid choke fail just showed how to NOT make a 2H choke.
>>> But it definitely did show how to make a 1.5mH choke.
>>>
>>> We had a bonfire a week ago.
>>> I noticed the charcoal left in the fire pit yesterday....so... just for
>>> giggles I ground up some of that charcoal in a
>>> coffee bean grinder. It made an extremely fine black dust.
>>> So now I am contemplating what goop to mix that dust with to make a
>>> resistor.
>>> AND

>>> I am contemplating how to bag this carbon dust to make a telephone
>>> ...old time telephone.. microphone.
>>>
>>>
>>> 15 years ago......I did a Mr Wizard type of "Science of Radio" show at
>>> the Franklin Institute Science Museum on Friday
>>> nights for two years. I did six 45 minute shows from 6PM until midnight
>>> for 800 kids that
>>> slept on the floor....a gig called CAMP IN. It was one heck of show. I
>>> also did it on the road for schools and scouts.
>>>
>>> I would always show and tell all modes of ham operation from spark gap
>>> to SSTV and often parents would say this
>>> is a rich man's hobby.
>>> And in tough times..... young parents didn't have a lot of spare cash to
>>> blow on a hobby.
>>> So I made sure I always did show and tell home brew QRP rigs and the
>>> real caveman science
>>> crystal radios....... just to show them that a handful of parts, not
>>> real expensive parts, could get you started in the hobby of electronics
>>> and ham radio.
>>>
>>> So when I go down this path of tinkering with making ANY component from
>>> scratch......
>>> its not that I need to replicate something from 1930.
>>> I am just trying to learn how to make something from scratch so I can
>>> teach the kids..and parents...
>>> that there is more to this hobby of electronics than buying penny
>>> transistors from China.
>>> There is an actual science of creating working components ....
>>> yourself.... with readily available materials.
>>>
>>> I have on hand right now every component required to build every
>>> transistor radio in a few hundred publications.....
>>> ranging from the simplest germanium diode with a germanium PNP circuit
>>> or AM radio TA7642 IC or 7.16resonator based regens... to any flavor of
>>> NE602 rigs...
>>>
>>> BUT
>>> I'm not building radios to sell. I wanted to learn HOW they work
>>> first.... the kit the components for scouts.
>>> So winding a 2H choke to flatten ripple into an 0C3 103 volt regulator tube
>>> has really been very educational for me.
>>> Definitely learning more than the paint by numbers transistors circuits
>>> I built over the years.
>>>
>>>
>>>
>>> On 05/28/2016 01:26 PM, 'Leonard Meek'lemeek@... [regenrx]
>>> wrote:

>>>> I think winding your own choke would be rather time consuming, with
>>>> unpredictable results, unless you're a young guy with nothing else to do.
>>>> There are plenty of chokes on the market, not real cheap but reliable. I've
>>>> also used small fluorescent lamp ballasts with some success. Don't spend all
>>>> your time winding chokes, and get down to building your radio. It's more
>>>> fun.
>>>>
>>>> Leonard
>>>>
>>>> ----- Original Message -----
>>>> From: "Robroomberg@... [regenrx]"<regenrx@yahoogroups.com>
>>>> To: "QRP-L Mailing List"<qrp-l@...>
>>>> Sent: Friday, May 27, 2016 6:38 PM
>>>> Subject: [regenrx] Walmart wire home brew choke is 1.5mH
>>>>
>>>>
>>>>> The mission was to hand wind a 2H power supply choke.
>>>>> The experiment started with just winging it by stacking steel plates in a
>>>>> 2 inch toroid shape then wind as much wire as would fit in one layer.
>>>>> Since the wire comes in 4 foot spools I figured I would make taps.
>>>>> I chose 22 gauge wire because I thought a thinner wire would burn up
>>>>> like a fuse.
>>>>> Perhaps that was a bad idea because the result was definitely 1.5 mH
>>>>> which is a
>>>>> thousand times smaller than the desired result of 2H.
>>>>>
>>>>> http://www.learnmorsecode.com/regenx/choke/index.html
>>>>>
>>>>> But it was a good way to determine if $5 of craft wire would make an
>>>>> inductor.
>>>>>
>>>>> How thin is the wire inside a real 2H choke?
>>>>>
>>>>> http://www.learnmorsecode.com/regenx/choke/2hchoke.jpg
>>>>>
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26527. Re: winding your own choke would be rather time consuming BOY

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-29 11:54:43 UTC
From: david.newkirk@...
Topic: 26507 Message: 26527

Rob wrote:

> Arnie said there was a Ben Tongue QUADRUPLER DIODE radio in SPRAT
> but we can't seem to find that schematic. Anyone got that circuit to share?

http://www.bentongue.com/xtalset/xtalset.html
http://www.bentongue.com/xtalset/xtalset.html

might have what you need.

Best regards,

Dave
amateur radio W9BRD
regenerative receivers spoken here

26528. Purell mixed with charcoal dust makes India ink

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-29 12:28:16 UTC
From: Rob
Topic: 26507 Message: 26528

Purell?
I had not thought of that.
But that reminds me of the India ink grid leak experiments.

There is a project on the web where a guy mixes graphite.... the kind
you lubricate
lock tumblers......
with liquid tape....
black glue that electricians use instead of black tape.....
and he builds LED art work light fixtures and other electronics using
goop made resistors.

Teaching the kids to do make something instead of buy something does a
lot more than
make a toy to play with.

It teaches the kids how to think to solve real world problems without
hiring a consultant.

My son sat next to me, with a welding mask, when I patched the leaking
60 year old oil
furnace with a stick welder.
I let him draw arcs and weld metal plates when he was 12 years old.
Two years later he was taking parts from two broken down junk bicycles
and building
one good bike.
He asked for some help because he could not align the forward derailer
properly.
I saw that the frame was cut just above the rear axle and declared that
it would never work
because when the kid sits on the bike it would flex.... and asked WHY is
the frame cut.
He said they could not figure out how to break the chain to swap bikes
so he CUT the frame.
I then asked with what tool did he cut the frame?
He replied "your bolt cutter".
I was surprised.
HUH?
bolt cutters!?
and saw the second bike frame ..the chain source bike.. had a chewed up
frame also.
and then I saw the bolt cutter..... jaws all shattered with chunks missing.

OK.... so.... then I asked the kid what was he thinking? What good is a
broken frame
bike?

To which my son replied "I figured you would weld it back together for me."
Yep. Thats my son. Taught him that Dad can make or fix anything.
10 minutes later that bike was rolling down the street.

And whats he do now..20 years later?

He delivers and builds stages for the rock concerts that are held inside
the NASCAR infield
and after the band plays...the stage MUST be disassembled before the
race starts
so the view is not blocked.

So yea..... teach the kids whatever you can..... technical, math,
machine shop skills.....
snowboarding..... whatever you can.....
because one day the PLAYSTATION or NINTENDO or whatever internet
connected NETFLIX
crap we have been feeding these kids for their first 15 years of life is
going to backfire
and the best job they will get will be honing their skills saying "DO
YOU WANT FRIES WITH THAT?"....
IF they can pass a drug test.

On 05/29/2016 12:43 AM, Tom Lee tomlee@... [regenrx] wrote:
> Hi Rob,
>
> Wonderful that you shared your skills with a generation of youngsters.
> I'm sure that you inspired quite a few kids!
>
> As to what goop might be useful for your bonfire ash experiments, I have
> used Purell as a carrier for graphite dust to make conductive paint
> (poor man's aquadag) to repair keyboards and such. It might be worth
> including as a candidate for your experiments.
>
> --Cheers,
> Tom
>

26529. Re: [regenrx] winding your own choke would be rather time consuming BOY

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-29 14:21:09 UTC
From: Michael
Topic: 26507 Message: 26529

> YES... I love that book BOY ELECTRICIAN
> but the online PDF.. which I do have from
> http://www.tayloredge.com/museum/museum/TheBoyElectrician.pdf
> is too light to read and if I enhance the image I lose the detail in the
> drawings... see here:
> http://www.learnmorsecode.com/boy/index.html
> Is there any way to get a this to be readable...both text and images?

My download is slightly fuzzy and greyish, but perfectly readable.
Maybe tinkering with pdf reader settings will enhance readability.

Great stuff! Maybe I am older than I thought...

Michael

26530. Re: [regenrx] Purell mixed with charcoal dust makes India ink

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-29 16:39:31 UTC
From: J Ed
Topic: 26507 Message: 26530

I have a book you would probably be interested in. It's called "Voice of the Crystal" and it details making components of radios down to DIY variable capacitors, roller inductors, high impedance headphones, and crystal detectors. Send me an email off list if you want it.

Ed AE7TE
On May 29, 2016 5:29 AM, "Rob roomberg@... [regenrx]" <regenrx@yahoogroups.com> wrote:

> Purell?
> I had not thought of that.
> But that reminds me of the India ink grid leak experiments.
>
> There is a project on the web where a guy mixes graphite.... the kind
> you lubricate
> lock tumblers......
> with liquid tape....
> black glue that electricians use instead of black tape.....
> and he builds LED art work light fixtures and other electronics using
> goop made resistors.
>
>
> Teaching the kids to do make something instead of buy something does a
> lot more than
> make a toy to play with.
>
> It teaches the kids how to think to solve real world problems without
> hiring a consultant.
>
> My son sat next to me, with a welding mask, when I patched the leaking
> 60 year old oil
> furnace with a stick welder.
> I let him draw arcs and weld metal plates when he was 12 years old.
> Two years later he was taking parts from two broken down junk bicycles
> and building
> one good bike.
> He asked for some help because he could not align the forward derailer
> properly.
> I saw that the frame was cut just above the rear axle and declared that
> it would never work
> because when the kid sits on the bike it would flex.... and asked WHY is
> the frame cut.
> He said they could not figure out how to break the chain to swap bikes
> so he CUT the frame.
> I then asked with what tool did he cut the frame?

> He replied "your bolt cutter".
> I was surprised.
> HUH?
> bolt cutters!?
> and saw the second bike frame ..the chain source bike.. had a chewed up
> frame also.
> and then I saw the bolt cutter..... jaws all shattered with chunks missing.
>
> OK.... so.... then I asked the kid what was he thinking? What good is a
> broken frame
> bike?
> To which my son replied "I figured you would weld it back together for me."
> Yep. Thats my son. Taught him that Dad can make or fix anything.
> 10 minutes later that bike was rolling down the street.
>
>
>
> And whats he do now..20 years later?
>
> He delivers and builds stages for the rock concerts that are held inside
> the NASCAR infield
> and after the band plays...the stage MUST be disassembled before the
> race starts
> so the view is not blocked.
>
> So yea..... teach the kids whatever you can..... technical, math,
> machine shop skills.....
> snowboarding..... whatever you can.......
> because one day the PLAYSTATION or NINTENDO or whatever internet
> connected NETFLIX
> crap we have been feeding these kids for their first 15 years of life is
> going to backfire
> and the best job they will get will be honing their skills saying "DO
> YOU WANT FRIES WITH THAT?"....
> IF they can pass a drug test.
>
>
> On 05/29/2016 12:43 AM, Tom Lee tomlee@... [regenrx] wrote:
> > Hi Rob,
> >
> > Wonderful that you shared your skills with a generation of youngsters.
> > I'm sure that you inspired quite a few kids!
> >
> > As to what goop might be useful for your bonfire ash experiments, I have
> > used Purell as a carrier for graphite dust to make conductive paint
> > (poor man's aquadag) to repair keyboards and such. It might be worth
> > including as a candidate for your experiments.
> >
> > --Cheers,
> > Tom

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26531. Re: [regenrx] Purell mixed with charcoal dust makes India ink

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-29 17:07:25 UTC
From: Tom Lee
Topic: 26507 Message: 26531

Rob,

<forehead slap> Thanks a lot for mentioning graphite lube. I'll have to get some -- it would certainly be a lot less work than grinding up graphite blocks!

--Cheers,
Tom

--
Prof. Thomas H. Lee
Allen Bldg. Rm.205
420 Via Palou Mall
Stanford University
Stanford, CA 94305-4070
http://www-smirc.stanford.edu

On 5/29/2016 5:28 AM, Rob roomberg@... [regenrx] wrote:
> Purell?
> I had not thought of that.
> But that reminds me of the India ink grid leak experiments.
>
> There is a project on the web where a guy mixes graphite.... the kind
> you lubricate
> lock tumblers......
> with liquid tape....
> black glue that electricians use instead of black tape.....
> and he builds LED art work light fixtures and other electronics using
> goop made resistors.
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>
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> lot more than
> make a toy to play with.
>
> It teaches the kids how to think to solve real world problems without
> hiring a consultant.
>
> My son sat next to me, with a welding mask, when I patched the leaking
> 60 year old oil
> furnace with a stick welder.
> I let him draw arcs and weld metal plates when he was 12 years old.
> Two years later he was taking parts from two broken down junk bicycles
> and building
> one good bike.
> He asked for some help because he could not align the forward derailer

> properly.
> I saw that the frame was cut just above the rear axle and declared that
> it would never work
> because when the kid sits on the bike it would flex.... and asked WHY is
> the frame cut.
> He said they could not figure out how to break the chain to swap bikes
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> HUH?
> bolt cutters!?
> and saw the second bike frame ..the chain source bike.. had a chewed up
> frame also.
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>
> OK.... so.... then I asked the kid what was he thinking? What good is a
> broken frame
> bike?
> To which my son replied "I figured you would weld it back together for me."
> Yep. Thats my son. Taught him that Dad can make or fix anything.
> 10 minutes later that bike was rolling down the street.
>
>
>
> And whats he do now..20 years later?
>
> He delivers and builds stages for the rock concerts that are held inside
> the NASCAR infield
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> So yea..... teach the kids whatever you can..... technical, math,
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> because one day the PLAYSTATION or NINTENDO or whatever internet
> connected NETFLIX
> crap we have been feeding these kids for their first 15 years of life is
> going to backfire
> and the best job they will get will be honing their skills saying "DO
> YOU WANT FRIES WITH THAT?"....
> IF they can pass a drug test.
>
>
> On 05/29/2016 12:43 AM, Tom Lee tomlee@... [regenrx] wrote:
>> Hi Rob,
>>
>> Wonderful that you shared your skills with a generation of youngsters.
>> I'm sure that you inspired quite a few kids!

>>
>> As to what goop might be useful for your bonfire ash experiments, I have
>> used Purell as a carrier for graphite dust to make conductive paint
>> (poor man's aquadag) to repair keyboards and such. It might be worth
>> including as a candidate for your experiments.
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>> --Cheers,
>> Tom
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26535. vintage 2H choke might be 36 gauge wire

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-30 07:35:30 UTC
From: Rob
Topic: 26507 Message: 26535

vintage 2H choke might be 36 gauge wire.

Now I can see why the last component in the AC ripple filter chain would
be a 1/4 watt resistor to act like a fuse.

http://www.learnmorsecode.com/regenx/choke/vntgchk2.jpg
http://www.learnmorsecode.com/regenx/choke/vntgchk1.jpg
http://www.learnmorsecode.com/regenx/choke/vntgchk3.jpg

26536. Re: vintage 2H choke might be 36 gauge wire

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-31 10:56:36 UTC
From: david.newkirk@...
Topic: 26507 Message: 26536

Rob wrote:

> vintage 2H choke might be 36 gauge wire.
>
> Now I can see why the last component in the AC ripple filter chain would > be a 1/4 watt resistor to act like a fuse.

A fuse resistor, or even an actual fuse, is a good idea especially now that most power supplies use silicon diodes capable of relatively high currents.

Fuse resistors were not used in the heyday of vacuum tubes, likely because the relatively high impedance of thermionic rectifiers tended to make the rectifier tube(s) pay the price of an extended short circuit. Look at power supply after power supply in yesteryear's tube-based articles and ham handbooks and you won't see one in the schematic.

Another aspect not superfically apparent in yesteryear's schematics was that high values of filter capacitance were more difficult to come by than high(er) inductance chokes. (Commonly we see filter C with values in relatively low multiples of 2 (2, 4, 8, 16 uF, with oil-filled capacitors were standard before electrolytics became sufficient reliable). Getting sufficient filtering with such low C mean you needed high L.

Beginning one's power-supply filter with a choke of at least the _critical inductance_--that's a term of art that you can research--protected one's rectifier tubes by limiting the peak current the rectifiers had to handle. Nowadays, when for pennies you can by high-voltage rectifier capable of _amperes_ of forward current, building in that much "iron" is less necessary, as relatively cheap high-value filter C can offset the absence of L.

Best regards,

Dave
amateur radio W9BRD

26537. RE: [regenrx] Re: vintage 2H choke might be 36 gauge wire

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-31 12:32:57 UTC
From: Paul Christensen
Topic: 26507 Message: 26537

>”Another aspect not superficially apparent in yesteryear's schematics was that high values of filter capacitance were more difficult to come by than high(er) inductance chokes. (Commonly we see filter C with values in relatively low multiples of 2 (2, 4, 8, 16 uF, with oil-filled capacitors were standard before electrolytics became sufficient reliable). Getting sufficient filtering with such low C mean you needed high L.”

I’m struggling with these early design decisions as I rebuild an old James Millen HV supply from the late 1940s. In searching for replacement oil caps, I discovered that as either capacitance or the voltage rating of the cap doubles, so do the physical HxWxD dimensions – at least for these early oil types.

In this particular supply, a Millen 90281, two oil caps are contained within a small compartment under the chassis and form the input to a C-L-C-L-C filter design. I’m now going on my third set of caps. After a few days, the preceding caps failed with dead shorts.

Due to cabinet space contains, Millen used the two input caps in parallel. There’s simply not enough cabinet space for 1.5KV oil caps of the same capacity. Adding to the search difficulty is that GE and other oil cap manufactures used several different mounting styles. Apart from age, I can only reason that failure occurs because the no-load peak rectifier voltage is charging the input caps to slightly over the 1KV WVDC cap limit. My mains voltage runs ~ 127 VAC. In the late ‘40s, I suspect normal line voltage ran closer to 115 VAC. So, unless I reduce line voltage with a Variac or similar autotransformer device, I may forever be stuck in this situation. It’s probably a good idea anyway.

Since the two input caps cannot be seen with the bottom cover in place, I’ve been tempted to use a pair of 2KV/2uF Polypropylene film caps. While quite large, they do fit in the compartment. Seems to me the ESR of these film caps should be close to that of oil caps. Any reason why not?

BTW, back in the late ‘20s, Millen authored a multi-part series of articles in QST that dissect the operation of multi-stage PS filters. The first article is titled “The First Filter Condenser,” and appears on p. 33 of the Sept., 1927 issue. This series represents an important milestone in power supply development as regen gear was transitioning from battery operation to AC-mains supplies.

Paul, W9AC

26538. B+ supply question

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-31 13:25:32 UTC
From: geoman4919@...
Topic: 26538 Message: 26538

In my visit to the local goodwill I noticed a lot of cell phone chargers, many of which have small transformers inside. I had a thought. Can you connect two transformers together so that identical voltage primaries are connected to get an isolated 110 volt ac? Might help with small tube type regenerative radios.

73
kd6iwd

26539. Re: [regenrx] B+ supply question

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-31 13:37:45 UTC
From: Prof. Arnaldo Coro Antich
Topic: 26538 Message: 26539

Absolutely right amigo !
Back to back connection of identical transformers provides
excellent power line isolation.
If the secondary windings can handle enough current and are
providing 12 volts , then you end up with the best of two worlds...
Use the 12 volts at the link between the two transfomers to
provide filament voltage to your vacuum tube radio (need to use
a 12 volts filament tube, or two 6 volts filament tubes that take
the same current connected in series...
At the ¨ other side ¨ of the second transformer you will have,
for example about 120 volts AC, that can be properly rectified
and used .
BUT, about the cellphone chargers... BE AWARE, that most of them
if not all use SWITCHED MODE POWER SUPPLIES, that are
transformerless circuits...
OLD, ancient walwarts for powering 5, 6 , 9 or 12 volts solid state
devices did used transformers , conventional bridge o two diodes
rectifiers and a large capacity electrolytic...
73 and DX
Arnie Coro
CO2KK
Host of Dxers Unlimited

On 31/05/16 09:25, geoman4919@... [regenrx] wrote:
>
>
> /In my visit to the local goodwill I noticed a lot of cell phone
> chargers, many of which have small transformers inside. I had a
> thought. Can you connect two transformers together so that identical
> voltage primaries are connected to get an isolated 110 volt ac? Might
> help with small tube type regenerative radios./
>
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26540. Re: [regenrx] B+ supply question

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-31 14:05:12 UTC
From: Rob
Topic: 26538 Message: 26540

We just had a week of discussions asking this same question:
Re: [regenrx] is it OK to use two 12 volt transformers to make 170 volts
based on this circuit I found here:
http://www.bristolwatch.com/radio/index.htm

so you could review the 170 volts banter and learn a lot.

On 05/31/2016 09:25 AM, geoman4919@... [regenrx] wrote:
>
> /In my visit to the local goodwill I noticed a lot of cell phone
> chargers, many of which have small transformers inside. I had a
> thought. Can you connect two transformers together so that identical
> voltage primaries are connected to get an isolated 110 volt ac? Might
> help with small tube type regenerative radios./
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> /73/
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> /kd6iwd/
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26541. Re: [regenrx] B+ supply question

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-31 15:27:05 UTC
From: Jim Scott
Topic: 26538 Message: 26541

Short answer: YES

Some things to consider. (SRI if this is repeating other posts - I've read none)

The input transformer must be able to deliver (at minimum) the *total* power consumed by *all* loads, then (as a rule of thumb) multiply by 1.1 to account for losses.

The "step up" transformer will lose some efficiency (hooked up backward) but will work nicely. Again the size is determined by the power consumed at its output plus losses.

FWIW: I would reccommend using 1N4007 diodes, since the entire line 1N400X are all lower grades of this part, all are cheap! Added plus, the 1N4007 makes a nice poor man's varicap.

Finally, a full wave rectifier circuit would allow reduction of the size of the filter cap by 1/2. CAPS are expensive compared to diodes, but check the junk box first. :-)

You should see about 160-170V from this circuit under no load.

Hope this helps.

73,

Jim Scott
WB0IYC
Life Member ARRL
FISTS 15327
Joplin, MO EM27
http://www.wb0iyc.com

The whole universe is waiting...
http://www.jpl.nasa.gov/

-----Original Message-----
From: Rob roomberg@... [regenrx] [mailto:regenrx@yahoogroups.com]
Sent: Tuesday, May 31, 2016 09:05 AM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] B+ supply question

We just had a week of discussions asking this same question:
Re: [regenrx] is it OK to use two 12 volt transformers to make 170 volts
based on this circuit I found here:
http://www.bristolwatch.com/radio/index.htm

so you could review the 170 volts banter and learn a lot.

On 05/31/2016 09:25 AM, geoman4919@... [regenrx] wrote:

In my visit to the local goodwill I noticed a lot of cell phone chargers, many of which have small transformers inside. I had a thought. Can you connect two transformers together

so that identical voltage primaries are connected to get an isolated 110 volt ac? Might help with small tube type regenerative radios.

73
kd6iwd

26542. Re: [regenrx] B+ supply question

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-31 15:45:26 UTC
From: Prof. Arnaldo Coro Antich
Topic: 26538 Message: 26542

About the back to back transformers utility power supply

I use 1N4007 recycled from CFL circuit boards.... at zero cost !
Also use high capacitance electrolytics recycled from computer
power supplies... 220 mfd, 330 mfd and even 470 mfd at no less
than 250 or 350 volts provided great filtering !
Using a 10 Henry choke input filter is also a great idea....
The 170 volts or so output will provide enough voltage to
strike a VR105 or VR75 gaseous discharge voltage regulator tube
that is a worthwhile addition to the utility power supply.
In a more recent version, I wound a 6 volts winding on the
second transformer to make a 1 amp regulated 9 volts power supply
that can be second step regulated to 6 volts to feed the filaments
of the regenerative detector tube...
Also useful to feed the filament of the first audio amplifier stage
helping to reduce hum...
Follow my advice and build the power supply on a separate chassis !!!

73 and DX
Arnie Coro
CO2KK

On 31/05/16 11:27, 'Jim Scott' jim.scott@... [regenrx]
wrote:
>
>
> Short answer: YES
>
> Some things to consider. (SRI if this is repeating other posts - I've
> read none)
>
> The input transformer must be able to deliver (at minimum) the *total*
> power consumed by *all* loads, then (as a rule of thumb) multiply by
> 1.1 to account for losses.
>
> The "step up" transformer will lose some efficiency (hooked up
> backward) but will work nicely. Again the size is determined by the
> power consumed at its output plus losses.
>
> FWIW: I would reccommend using 1N4007 diodes, since the entire line
> 1N400X are all lower grades of this part, all are cheap! Added plus,
> the 1N4007 makes a nice poor man's varicap.
>
> Finally, a full wave rectifier circuit would allow reduction of the
> size of the filter cap by 1/2. CAPS are expensive compared to diodes,
> but check the junk box first. :-)

>
> You should see about 160-170V from this circuit under no load.
>
> Hope this helps.
>
> 73,
>
> Jim Scott
> WB0 IYC
> Life Member ARRL
> FISTS 15327
> Joplin, MO EM27
> http://www.wb0iyc.com
>
> The whole universe is waiting...
> http://www.jpl.nasa.gov/
>
>
> -----Original Message-----
> *From:* Rob roomberg@... [regenrx]
> [mailto:regenrx@yahoogroups.com]
> *Sent:* Tuesday, May 31, 2016 09:05 AM
> *To:* regenrx@yahoogroups.com
> *Subject:* Re: [regenrx] B+ supply question
>
> We just had a week of discussions asking this same question:
> Re: [regenrx] is it OK to use two 12 volt transformers to make 170
> volts
> based on this circuit I found here:
> http://www.bristolwatch.com/radio/index.htm
>
> so you could review the 170 volts banter and learn a lot.
>
>
>
>
> On 05/31/2016 09:25 AM, geoman4919@... [regenrx] wrote:
>>
>> /In my visit to the local goodwill I noticed a lot of cell phone
>> chargers, many of which have small transformers inside. I had a
>> thought. Can you connect two transformers together so that
>> identical voltage primaries are connected to get an isolated 110
>> volt ac? Might help with small tube type regenerative radios./
>>
>> /
>> /
>>
>> /73/
>>
>> /kd6iwd/

>>
>
>
>
>

26543. Re: [regenrx] B+ supply question

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-31 17:28:19 UTC
From: Leonard Meek
Topic: 26538 Message: 26543

I've been waiting for someone to bring up the subject of efficiency with back to back transformers. I would still like to know why 170 volts obtained this way is any less dangerous than 170 (properly fused) obtained right off the power line. I use IEC connectors with all my projects, which require a 3 wire grounded power cable. Of course, this may not work for people living in areas where the power system is not grounded or polarized.

Leonard

----- Original Message -----
From: 'Jim Scott' jim.scott@scottelectronic.com [regenrx]
To: regenrx@yahoogroups.com
Sent: Tuesday, May 31, 2016 5:27 AM
Subject: Re: [regenrx] B+ supply question

Short answer: YES

Some things to consider. (SRI if this is repeating other posts - I've read none)

The input transformer must be able to deliver (at minimum) the *total* power consumed by *all* loads, then (as a rule of thumb) multiply by 1.1 to account for losses.

The "step up" transformer will lose some efficiency (hooked up backward) but will work nicely. Again the size is determined by the power consumed at its output plus losses.

FWIW: I would reccommend using 1N4007 diodes, since the entire line 1N400X are all lower grades of this part, all are cheap! Added plus, the 1N4007 makes a nice poor man's varicap.

Finally, a full wave rectifier circuit would allow reduction of the size of the filter cap by 1/2. CAPS are expensive compared to diodes, but check the junk box first. :-)

You should see about 160-170V from this circuit under no load.

Hope this helps.

73,

Jim Scott
WB0IYC
Life Member ARRL
FISTS 15327
Joplin, MO EM27
http://www.wb0iyc.com

The whole universe is waiting...
http://www.jpl.nasa.gov/

-----Original Message-----
From: Rob roomberg@... [regenrx] [mailto:regenrx@yahoogroups.com]

Sent: Tuesday, May 31, 2016 09:05 AM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] B+ supply question

We just had a week of discussions asking this same question:
Re: [regenrx] is it OK to use two 12 volt transformers to make 170 volts
based on this circuit I found here:
http://www.bristolwatch.com/radio/index.htm

so you could review the 170 volts banter and learn a lot.

On 05/31/2016 09:25 AM, geoman4919@... [regenrx] wrote:

In my visit to the local goodwill I noticed a lot of cell phone chargers, many of which have small transformers inside. I had a thought. Can you connect two transformers together so that identical voltage primaries are connected to get an isolated 110 volt ac? Might help with small tube type regenerative radios.

73

kd6iwd

26544. Re: [regenrx] B+ supply question

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-31 17:34:00 UTC
From: Leonard Meek
Topic: 26538 Message: 26544

idon't know why this got cut, but here's my comments again:

I've been waiting for someone to bring up the subject of efficiency with back to back transformers. I would still like to know why 170 volts obtained this way is any less dangerous than 170 (properly fused) obtained right off the power line. I use IEC connectors with all my projects, which require a 3 wire grounded power cable. Of course, this may not work for people living in areas where the power system is not grounded or polarized.

Leonard
----- Original Message -----
From: 'Leonard Meek' lemeek@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Tuesday, May 31, 2016 7:28 AM
Subject: Re: [regenrx] B+ supply question

☐

Short answer: YES

Some things to consider. (SRI if this is repeating other posts - I've read none)

The input transformer must be able to deliver (at minimum) the *total* power consumed by *all* loads, then (as a rule of thumb) multiply by 1.1 to account for losses.

The "step up" transformer will lose some efficiency (hooked up backward) but will work nicely. Again the size is determined by the power consumed at its output plus losses.

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From: Rob roomberg@... [regenrx] [mailto:regenrx@yahoogroups.com]
Sent: Tuesday, May 31, 2016 09:05 AM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] B+ supply question

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Re: [regenrx] is it OK to use two 12 volt transformers to make 170 volts
based on this circuit I found here:
http://www.bristolwatch.com/radio/index.htm

so you could review the 170 volts banter and learn a lot.

On 05/31/2016 09:25 AM, geoman4919@yahoo.com [regenrx] wrote:

In my visit to the local goodwill I noticed a lot of cell phone chargers, many of which have small transformers inside. I had a thought. Can you connect two transformers together so that identical voltage primaries are connected to get an isolated 110 volt ac? Might help with small tube type regenerative radios.

73

kd6iwd

26545. Re: [regenrx] B+ supply question

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-31 18:12:43 UTC
From: Jim Scott
Topic: 26538 Message: 26545

The transformer (by design) provides isolation from the "outside world". The high voltage is still dangerous, but its circuit is self contained and isolated from external wiring. On the contrary, if you grab the 120VAC line directly (or even through a DC circuit) then touch any object attached to earth, you likely will be shocked.

Not so with isolation from the line. The "secondary" circuits do not provide safety other than isolation from the line.

73,

Jim Scott
WB0IYC
Life Member ARRL
FISTS 15327
Joplin, MO EM27rc
http://www.wb0iyc.com

HF rocks... I don't think so.
I prefer using VFOs

-----Original Message-----
From: 'Leonard Meek' lemeek@... [regenrx] [mailto:regenrx@yahoogroups.com]
Sent: Tuesday, May 31, 2016 12:34 PM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] B+ supply question

☐

idon't know why this got cut, but here's my comments again:

I've been waiting for someone to bring up the subject of efficiency with back to back transformers. I would still like to know why 170 volts obtained this way is any less dangerous than 170 (properly fused) obtained right off the power line. I use IEC connectors with all my projects, which require a 3 wire grounded power cable. Of course, this may not work for people living in areas where the power system is not grounded or polarized.

Leonard

----- Original Message -----
From:'Leonard Meek' lemeek@... [regenrx]
To:regenrx@yahoogroups.com
Sent: Tuesday, May 31, 2016 7:28 AM
Subject: Re: [regenrx] B+ supply question

☐ Short answer: YES

Some things to consider. (SRI if this is repeating other posts - I've read none)

The input transformer must be able to deliver (at minimum) the *total* power consumed by *all* loads, then (as a rule of thumb) multiply by 1.1 to account for losses.

The "step up" transformer will lose some efficiency (hooked up backward) but will work nicely. Again the size is determined by the power consumed at its output plus losses.

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Finally, a full wave rectifier circuit would allow reduction of the size of the filter cap by 1/2. CAPS are expensive compared to diodes, but check the junk box first. :-)

You should see about 160-170V from this circuit under no load.

Hope this helps.

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From: Rob roomberg@... [regenrx] [mailto:regenrx@yahoogroups.com]
Sent: Tuesday, May 31, 2016 09:05 AM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] B+ supply question

We just had a week of discussions asking this same question:
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In my visit to the local goodwill I noticed a lot of cell phone chargers, many of which have small transformers inside. I had a thought. Can you connect two transformers together so that identical voltage primaries are connected to get an isolated 110 volt ac? Might help with small tube type regenerative radios.

73
kd6iwd

26546. Re: B+ supply question

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-31 15:00:23 UTC
From: borreb@...
Topic: 26538 Message: 26546

I use principally the same technique to power my Torn.E.b. I have a stabilized filament voltage and a well filtered anode voltage to operate the radio without any hum / noice
(I will never use some switchmode psu of any kind to supply power to such an old warrior ... ☐)

26547. Re: [regenrx] B+ supply question

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-31 19:06:25 UTC
From: Leonard Meek
Topic: 26538 Message: 26547

I think the bottom line here is, don't grab the 12- VAC line, ever. I use an isolation transformer with many of my commercial receivers for reduction of line noise, and so I can select either line ground or earth ground. I also noticed that it greatly reduced the hum in my R-649A (an AC/DC receiver) Other reasons for using transformerless supplies, they take less space, and I'm running out of power transformers. I have built several separate unversal power supplies, one with a built in audio amp and electronic circuit breakers, but I prefer to have everything on one chassis.

Leonard

----- Original Message -----
From: 'Jim Scott' jim.scott@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Tuesday, May 31, 2016 8:12 AM
Subject: Re: [regenrx] B+ supply question

The transformer (by design) provides isolation from the "outside world". The high voltage is still dangerous, but its circuit is self contained and isolated from external wiring. On the contrary, if you grab the 120VAC line directly (or even through a DC circuit) then touch any object attached to earth, you likely will be shocked.

Not so with isolation from the line. The "secondary" circuits do not provide safety other than isolation from the line.

73,

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Life Member ARRL
FISTS 15327
Joplin, MO EM27rc
http://www.wb0iyc.com

HF rocks... I don't think so.
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From: 'Leonard Meek' lemeek@... [regenrx] [mailto:regenrx@yahoogroups.com]
Sent: Tuesday, May 31, 2016 12:34 PM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] B+ supply question

☐ idon't know why this got cut, but here's my comments again:

I've been waiting for someone to bring up the subject of efficiency with back to back transformers. I would still like to know why 170 volts obtained this way is any less

dangerous than 170 (properly fused) obtained right off the power line. I use IEC connectors with all my projects, which require a 3 wire grounded power cable. Of course, this may not work for people living in areas where the power system is not grounded or polarized.

Leonard
----- Original Message -----
From: 'Leonard Meek' lemeek@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Tuesday, May 31, 2016 7:28 AM
Subject: Re: [regenrx] B+ supply question

☐
Short answer: YES

Some things to consider. (SRI if this is repeating other posts - I've read none)

The input transformer must be able to deliver (at minimum) the *total* power consumed by *all* loads, then (as a rule of thumb) multiply by 1.1 to account for losses.

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Hope this helps.

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From: Rob roomberg@... [regenrx] [mailto:regenrx@yahoogroups.com]
Sent: Tuesday, May 31, 2016 09:05 AM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] B+ supply question

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In my visit to the local goodwill I noticed a lot of cell phone chargers, many of which have small transformers inside. I had a thought. Can you connect two transformers together so that identical voltage primaries are connected to get an isolated 110 volt ac? Might help with small tube type regenerative radios.

73

kd6iwd

26548. Re: [regenrx] B+ supply question

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-31 19:10:00 UTC
From: Leonard Meek
Topic: 26538 Message: 26548

My computer is short changing the numbers. Here's my comments again.

I think the bottom line here is, don't grab the 120 VAC line, ever. I use an isolation transformer with many of my commercial receivers for reduction of line noise, and so I can select either line ground or earth ground. I also noticed that it greatly reduced the hum in my R-649A (an AC/DC receiver) Other reasons for using transformerless supplies, they take less space, and I'm running out of power transformers. I have built several separate unversal power supplies, one with a built in audio amp and electronic circuit breakers, but I prefer to have everything on one chassis.

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Sent: Tuesday, May 31, 2016 8:12 AM
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Sent: Tuesday, May 31, 2016 12:34 PM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] B+ supply question

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Leonard
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Sent: Tuesday, May 31, 2016 7:28 AM
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Some things to consider. (SRI if this is repeating other posts - I've read none)

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Sent: Tuesday, May 31, 2016 09:05 AM
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Subject: Re: [regenrx] B+ supply question

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73

kd6iwd

26549. Re: winding your own choke would be rather time consuming

Yahoo group: regenrx (2016 — 2017)
Date: 2016-05-31 20:05:31 UTC
From: wa4qal@...
Topic: 26507 Message: 26549

---In regenrx@yahoogroups.com, <roomberg@...> wrote :

> I'm not a young man.
But I am VP of the local radio club so as the staff tinkerer I get to
>play like Edison and Tesla.
>This particular toroid choke fail just showed how to NOT make a 2H choke.
> But it definitely did show how to make a 1.5mH choke.

Cool.

The trick on winding toroids is to use a shuttle to carry the wire through the core and around it.

> We had a bonfire a week ago.
> I noticed the charcoal left in the fire pit yesterday....so... just for
> giggles I ground up some of that charcoal in a
> coffee bean grinder. It made an extremely fine black dust.
> So now I am contemplating what goop to mix that dust with to make a
> resistor.
> AND
> I am contemplating how to bag this carbon dust to make a telephone
> ...old time telephone.. microphone.

The binder of choice for "Carbon Composition Resistors" was some type of clay, which had the graphite mixed into it, and then fired, usually with electrodes embedded in the ends. That'll give you a start for some searches.

For the Carbon microphone, I believe that the graphite was just included loosely between the microphone frame and the diaphragm.

> 15 years ago......I did a Mr Wizard type of "Science of Radio" show at
> the Franklin Institute Science Museum on Friday
> nights for two years. I did six 45 minute shows from 6PM until midnight
> for 800 kids that
> slept on the floor....a gig called CAMP IN. It was one heck of show. I
> also did it on the road for schools and scouts.

Sounds like fun.

> I would always show and tell all modes of ham operation from spark gap
> to SSTV and often parents would say this
> is a rich man's hobby.
> And in tough times..... young parents didn't have a lot of spare cash to
> blow on a hobby.
> So I made sure I always did show and tell home brew QRP rigs and the
> real caveman science
> crystal radios....... just to show them that a handful of parts, not

> real expensive parts, could get you started in the hobby of electronics
> and ham radio.

:-)

> So when I go down this path of tinkering with making ANY component from
> scratch......
> its not that I need to replicate something from 1930.
> I am just trying to learn how to make something from scratch so I can
> teach the kids..and parents...
> that there is more to this hobby of electronics than buying penny
> transistors from China.
> There is an actual science of creating working components ....
> yourself.... with readily available materials.

Don't forget about waxed paper capacitors. The old timers used coat hangers for
the core of some transformers. I'd probably recommend a pass on the electrolytic
rectifiers (aka "slop jar rectifiers", for reasons which will become apparent if you try
to make one).

Heck, I've even made a diode from a partially burned out, dual filament, automotive
brake light bulb.

For more radical stuff, see "The Voice of the Crystal", and "Instruments of Amplification".

> I have on hand right now every component required to build every
> transistor radio in a few hundred publications.....
> ranging from the simplest germanium diode with a germanium PNP circuit
> or AM radio TA7642 IC or 7.16resonator based regens... to any flavor of
> NE602 rigs...

You can fabricate crystal radio diodes out of natural mineral Galena or Iron Pyrite.
For those desperate (stupid?) enough, you can even synthesize Galena from molten
Lead and powdered Flowers of Sulfur (But, this is strictly an outdoor activity. Wear
all appropriate safety gear, and keep things SMALL!). For that matter, there are
literally hundreds of natural materials which will function as a diode in a crystal radio.

http://pw1.netcom.com/~wa4qal/nontrad.txt

Greenleaf Whittier Pickard (q.v.) tested something like 33,000 materials or combinations
of
materials back in the early days of radio.

> BUT
> I'm not building radios to sell. I wanted to learn HOW they work
> first.... the kit the components for scouts.
> So winding a 2H choke to flatten ripple into an 0C3 103 volt regulator tube
> has really been very educational for me.
> Definitely learning more than the paint by numbers transistors circuits
> I built over the years.

I like to use a variable speed electric drill to rotate the core, while
feeding magnet wire onto it, to wind a coil with. Make sure the

person running the drill is VERY trustworthy, and remember that magnet wire can cut you like a knife.

Dave

26550. RE: [regenrx] Re: vintage 2H choke might be 36 gauge wire

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-01 11:04:32 UTC
From: david.newkirk@...
Topic: 26507 Message: 26550

Paul wrote:

> I’m struggling with these early design decisions as I rebuild an old James Millen HV supply from the late
> 1940s. In searching for replacement oil caps, I discovered that as either capacitance or the voltage rating
> of the cap doubles, so do the physical HxWxD dimensions – at least for these early oil types.

I gather that you want the supply to look as it did in its heyday. Otherwise you'd use modern electrolytic caps--seriesed and with equalizing resistors as necessary--and be done with it.

I strongly recommend avoiding vintage oil-filled capacitors for the reason that the oil in them almost certainly includes polychlorinated biphenyls (PCBs) as fireproofing agents. Capacitors labeled to trumpet such elixirs as Dykanol and Pyranol are examples; more about this problem in the document available at
https://www.cdph.ca.gov/programs/hesis/Documents/pcbs.pdf
https://www.cdph.ca.gov/programs/hesis/Documents/pcbs.pdf . For example, if you've ever encountered oil-cap oil that smells like mothballs, you have likely encountered PCBs.

That such old caps contain hazardous oil also means that a common technique of those seeking to reproduce yesteryear's look can't safely adopt the dodge of draining the case of a given old oil cap, removing its innards and replacing them with modernity. So what I recommend that you obtain/fashion capacitor cans that look reasonably like the original oil-filled jobs and mounting an equivalent network of modern series/equalized electrolytic parts within them.

And while you're at it, make sure that the peak/surge voltage applied to a given modern equivalent stack doesn't exceed 2/3 to 3/4 the working voltage of the stack. If a line voltage change from 110 to 125 can blow power-supply parts, that's a poorly designed supply.

Best regards,

Dave
amateur radio W9BRD

26551. Re: [regenrx] B+ supply question

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-01 11:13:20 UTC
From: david.newkirk@...
Topic: 26538 Message: 26551

Rob wrote:

> is it OK to use two 12 volt transformers to make 170 volts
> based on this circuit I found here:
>
> http://www.bristolwatch.com/radio/index.htm http://www.bristolwatch.com/radio/index.htm
> so you could review the 170 volts banter and learn a lot.

Yes, but three things:

1 Use a full-wave rectifier (four diodes in a bridge) instead of a half-wave rectifier. A half-wave rectifier doesn't use the full current capability of its driving transformer to provide useful output _and_ needlessly heats the transformer because it causes a net dc flow through the transformer secondary.

2 Don't use 1N4001 rectifier diodes, even in a bridge, for a 170-V-ish supply. Use 1N4005s or higher-n 1N400n parts or their equivalents. (If you're ordering some, get 1N4007s, as their 1-kV PIV rating will make them hard to pop [from overvoltage] in 170-V-ish supplies.)

What's "PIV"? Do go read up on the voltages and currents that power-supply rectifiers must withstand in various rectifier/filter configurations. And then go look at a spec sheet for the 1N400n-series diodes to get an idea of what different members of the series can take. (The lower the n in 1N400n, the lower the PIV rating of the diode. Fun fact: And 1N4007s can also be used as PIN diodes for RF switching....)

3 Powering heaters _and_ the second transformer from the first transformer means that you have to take both output paths into consideration in determining how much heater power and dc-supply power you can expect to get without overloading the first transformer.

Best regards,

Dave
amateur radio W9BRD

26552. Re: [regenrx] B+ supply question

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-01 12:00:29 UTC
From: david.newkirk@...
Topic: 26538 Message: 26552

Leonard wrote:

> I've been waiting for someone to bring up the subject of efficiency with back to back transformers.
> I would still like to know why 170 volts obtained this way is any less dangerous than 170 (properly
> fused) obtained right off the power line.

That's two separate questions.

Here's how this issue works for me:

1 The value of transformer isolation is isolation from hot _and_ neutral on the line and current-limiting (in the case of a secondary-side fault) by means of the impedance of the transformer.

Isolation from hot _and neutral_ matters because there are all sorts of line-side faults, including wiring by yahoos that transposes hot and neutral and including high resistance in, or outright failure of, the neutral connection. I have personal experience with failure of the neutral.

And of course transformers can also step voltages up and down as they provide that isolation. Only in this special 1:1 voltage case does transformerless operation suggest itself. (Nope, voltage multiplication does not change my position. Only an isolation transformer or transformers protect me from calamity and idiocy on the line side, and idiocy on my side.)

2 Once the life-and-property-protecting value of isolation is established, questions of efficiency are moot. (And good-quality transformers make it more so. Have you _ever_ seen catalog listings for transformers convey their efficiency? No, because for properly applied good-quality transformers it's high. We're only powering up little regenerative receivers here!)

If you have or can buy an actual isolation transformer, fine; if not, two transformers back to back will be only slightly less efficient, especially if one is sufficiently mentally alert enough to avoid using half-wave rectification--which _very noticeably_ heats the transformer compared to the full-wave-bridge case--on the output side.

Out,

Dave
amateur radio W9BRD

26553. RE: [regenrx] Re: vintage 2H choke might be 36 gauge wire

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-01 12:16:10 UTC
From: Paul Christensen
Topic: 26507 Message: 26553

>”I gather that you want the supply to look as it did in its heyday. Otherwise you'd use modern electrolytic caps--seriesed and with equalizing resistors as necessary--and be done with it.”

That was my first thought, but couldn’t bring myself to using ‘lytics in this instance. Although, if it was the last available port in a storm…

While working with the older oil caps, I’ve been using surgical gloves to keep the PCB-infested oil from making skin contact. In a prior working life, our company had to dispose of several hundred pounds of GE Pyranol-branded caps. Removal was very expensive and was facilitated though a GE-licensed contractor. Makes me wonder how many OT ops thought nothing about coming into contact with capacitor and transformer oil. They didn’t fear exposed HV so why oil?

Several sets of caps are due to arrive next week and I’ll likely make a final decision at that time. Of course, the new oil caps don’t contain PCBs but they may have to be kludged into the compartment.

Excellent point about selecting caps with some WVDC headroom. It would be an interesting discussion with James Millen since he likely contributed to the electrical, as well as mechanical PS design.

Paul, W9AC

26554. Re: [regenrx] Re: vintage 2H choke might be 36 gauge wire

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-01 13:44:49 UTC
From: Jim Wiley
Topic: 26507 Message: 26554

OK, it's time to bring up the PCB "scare" again.

Some years ago, between 1965 and 1975, I was a technician on the Alaska "White Alice" OTH troposcatter communications system. Part of our job was to routinely test the transformer oil in the transformers that powered the 10 KW and 50 KW klystron amplifiers. This oil was known by the trade name "Askarel", and was of course a PCB (polychlorinated biphenyl) compound.

It was not uncommon for a tech to have his or her hands in this oil up to their elbows during this process.

I have never heard of an instance where this exposure resulted in ANY sort of illness or health issue.

Now, I am not advocating that anyone go out and have a hot steaming cup of the stuff, and a bit of caution is prudent, but I personally think that the PCB problem is overblown to an incredible degree. And "incredible" is the right word (meaning not credible) - a person would have to literally drink the stuff by the gallon to get the same exposure as was fed to lab rats during the cancer tests. Hell's bells, drinking too much water can kill you! That is indeed true.

So, if you get a few drops of a PCB containing product on your hands, and you wash wherever there is / was skin contact, you aren't going to die later this afternoon, or even next year, for that matter.

It makes for a great "scare" to make people afraid of things though.

- Jim, KL7CC

On 6/1/2016 4:16 AM, 'Paul Christensen' w9ac@... [regenrx] wrote:
>
> >”I gather that you want the supply to look as it did in its heyday.
> Otherwise you'd use modern electrolytic caps--seriesed and with
> equalizing resistors as necessary--and be done with it.”
>
> That was my first thought, but couldn’t bring myself to using ‘lytics
> in this instance. Although, if it was the last available port in a storm…
>
> While working with the older oil caps, I’ve been using surgical gloves
> to keep the PCB-infested oil from making skin contact. In a prior
> working life, our company had to dispose of several hundred pounds of
> GE Pyranol-branded caps. Removal was very expensive and was
> facilitated though a GE-licensed contractor. Makes me wonder how many
> OT ops thought nothing about coming into contact with capacitor and
> transformer oil. They didn’t fear exposed HV so why oil?

>
> Several sets of caps are due to arrive next week and I’ll likely make
> a final decision at that time. Of course, the new oil caps don’t
> contain PCBs but they may have to be kludged into the compartment.
>
> Excellent point about selecting caps with some WVDC headroom. It would
> be an interesting discussion with James Millen since he likely
> contributed to the electrical, as well as mechanical PS design.
>
> Paul, W9AC
>
>

26555. FW: Distressing Moment...at Kit Radio Company

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-01 16:18:41 UTC
From: Hubert Miller
Topic: 26555 Message: 26555

Kit Radio Company in the U.K. – their KRC-2 regenerodyne was discussed here recently. I received and answered this email today. Looks like Anthony’s email

has been hacked:

>Andy – you actually have NO friends or relatives to help you? I feel for you. But If you are actually indigent in Istanbul, you’ll know to see your U.K. ambassador or consul.

I thought you were smarter than this.

-H M

From: kitradloco@... [mailto:kitradloco@...]
Sent: Wednesday, June 1, 2016 9:02 AM
To: kargo_cult@...
Subject: Re: Distressing Moment......Anthony Westbrook

Good to hear back from you.I am presently in Istanbul,Turkey with a friend of mine whose spouse recently passed on.I'm tapped out here and need a quick loan from you to clear some bills here .I promise to refund it as soon as i get back.

Tony Westbrook

-----Original Message-----
From: Hubert Miller < <mailto:kargo_cult@...> kargo_cult@...>
To: kitradloco < <mailto:kitradloco@...> kitradloco@...>
Sent: Wed, 1 Jun 2016 17:00
Subject: RE: Distressing Moment......Anthony Westbrook

What’s this about?

-H M

From: Tony Westbrook [<mailto:kitradioco@...?> mailto:kitradioco@...]
Sent: Wednesday, June 1, 2016 12:26 AM
To: <mailto:kargo_cult@...> kargo_cult@...
Subject: Distressing Moment......Anthony Westbrook

Hi,

I hope you're doing great? Actually, I'm having such a frustrating ordeal right now and need a favor from you. I'd appreciate if you could email me back asap.

Tony Westbrook

26556. Re: [regenrx] Re: vintage 2H choke might be 36 gauge wire

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-01 16:32:27 UTC
From: Richard
Topic: 26507 Message: 26556

All true. Askarel was invented to replace oil in transformers where the possibility of burning oil was unacceptable, such as in mines, inside buildings. chemical plants, etc. It was significantly more expensive than oil and was not used frivolously. It's only virtue is it will not support combustion. Absorb some Askarel/oil on a cotton swab, and if it burns it's not PCB. I think it's not all that common. It has a higher dielectric constant than oil, so it "could" advantageously be used in capacitors to get more capacitance in the can, but there is the cost factor... As noted, it smells funny, I remember an acrid smell in transformers, which clears your sinuses.

People working at GE were in it to their elbows and they are very healthy. If you don't ingest it or pour it in an open wound nothing will happen.

Richard, AA1P

On 06/01/2016 09:44 AM, Jim Wiley jwiley@... [regenrx] wrote:
>
> OK, it's time to bring up the PCB "scare" again.
>
> Some years ago, between 1965 and 1975, I was a technician on the
> Alaska "White Alice" OTH troposcatter communications system. Part of
> our job was to routinely test the transformer oil in the transformers
> that powered the 10 KW and 50 KW klystron amplifiers. This oil was
> known by the trade name "Askarel", and was of course a PCB
> (polychlorinated biphenyl) compound.
>
> It was not uncommon for a tech to have his or her hands in this oil up
> to their elbows during this process.
>
> I have never heard of an instance where this exposure resulted in ANY
> sort of illness or health issue.
>
> Now, I am not advocating that anyone go out and have a hot steaming
> cup of the stuff, and a bit of caution is prudent, but I personally
> think that the PCB problem is overblown to an incredible degree. And
> "incredible" is the right word (meaning not credible) - a person
> would have to literally drink the stuff by the gallon to get the same
> exposure as was fed to lab rats during the cancer tests. Hell's
> bells, drinking too much water can kill you! That is indeed true.
>
> So, if you get a few drops of a PCB containing product on your hands,
> and you wash wherever there is / was skin contact, you aren't going to
> die later this afternoon, or even next year, for that matter.
>

> It makes for a great "scare" to make people afraid of things though.
>
> - Jim, KL7CC
>
>
> On 6/1/2016 4:16 AM, 'Paul Christensen' w9ac@... [regenrx] wrote:
>>
>> >?I gather that you want the supply to look as it did in its heyday.
>> Otherwise you'd use modern electrolytic caps--seriesed and with
>> equalizing resistors as necessary--and be done with it.?
>>
>> That was my first thought, but couldn?t bring myself to using ?lytics
>> in this instance. Although, if it was the last available port in a
>> storm?
>>
>> While working with the older oil caps, I?ve been using surgical
>> gloves to keep the PCB-infested oil from making skin contact. In a
>> prior working life, our company had to dispose of several hundred
>> pounds of GE Pyranol-branded caps. Removal was very expensive and
>> was facilitated though a GE-licensed contractor. Makes me wonder how
>> many OT ops thought nothing about coming into contact with capacitor
>> and transformer oil. They didn?t fear exposed HV so why oil?
>>
>> Several sets of caps are due to arrive next week and I?ll likely make
>> a final decision at that time. Of course, the new oil caps don?t
>> contain PCBs but they may have to be kludged into the compartment.
>>
>> Excellent point about selecting caps with some WVDC headroom. It
>> would be an interesting discussion with James Millen since he likely
>> contributed to the electrical, as well as mechanical PS design.
>>
>> Paul, W9AC
>>
>
>

26557. Re: [regenrx] FW: Distressing Moment...at Kit Radio Company

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-01 16:35:39 UTC
From: Chris Weir
Topic: 26555 Message: 26557

I would council caution - you do seem to have realised this :-) Sadly this type of email is usually a scam by someone having hacked the email. Usually money is requested via a wire transfer service & you never hear from them again.

Chris.

On Wed, Jun 1, 2016 at 5:18 PM, Hubert Miller kargo_cult@msn.com [regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> Kit Radio Company in the U.K. – their KRC-2 regenerodyne was discussed
> here recently. I received and answered this email today. Looks like
> Anthony’s email
>
> has been hacked:
>
>
>
>
>
> >Andy – you actually have NO friends or relatives to help you? I feel for
> you. But If you are actually indigent in Istanbul, you’ll know to see your
> U.K. ambassador or consul.
>
> I thought you were smarter than this.
>
> -H M
>
>
>
> *From:* kitradloco@... [mailto:kitradloco@...]
> *Sent:* Wednesday, June 1, 2016 9:02 AM
> *To:* kargo_cult@...
> *Subject:* Re: Distressing Moment......Anthony Westbrook
>
>
>
> Good to hear back from you.I am presently in Istanbul,Turkey with a friend
> of mine whose spouse recently passed on.I'm tapped out here and need a
> quick loan from you to clear some bills here .I promise to refund it as
> soon as i get back.
>
>
>

> Tony Westbrook
>
>
>
> -----Original Message-----
> From: Hubert Miller <kargo_cult@...>
> To: kitradloco <kitradloco@...>
> Sent: Wed, 1 Jun 2016 17:00
> Subject: RE: Distressing Moment......Anthony Westbrook
>
> What’s this about?
>
> -H M
>
>
>
> *From:* Tony Westbrook [*mailto:kitradioco@...* <kitradioco@...?>]
>
> *Sent:* Wednesday, June 1, 2016 12:26 AM
> *To:* *kargo_cult@...* <kargo_cult@...>
> *Subject:* Distressing Moment......Anthony Westbrook
>
>
>
> Hi,
>
> I hope you're doing great? Actually, I'm having such a frustrating ordeal
> right now and need a favor from you. I'd appreciate if you could email me
> back asap.
>
> Tony Westbrook
>
>
>

26558. RE: [regenrx] FW: Distressing Moment...at Kit Radio Company

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-01 16:39:45 UTC
From: Hubert Miller
Topic: 26555 Message: 26558
Attachments: 3 described; binary payloads are missing from this source WARC

You don’t need to council me. I’m going to send money to someone overseas with no friends, associates, or relatives in his own country to lean on?

I advised him in that sorry instance, maybe best to make a new life in Istanbul.

I tried to phone the KRC but no ans; might try tomorrow.

I also forwarded to a U.K. magazine, Radiouser, and advised his website host.

And blocked the email sender.

-H M

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Wednesday, June 1, 2016 9:36 AM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] FW: Distressing Moment...at Kit Radio Company

I would council caution - you do seem to have realised this :-) Sadly this type of email is usually a scam by someone having hacked the email. Usually money is requested via a wire transfer service & you never hear from them again.

Chris.

On Wed, Jun 1, 2016 at 5:18 PM, Hubert Miller kargo_cult@... <mailto:kargo_cult@...> [regenrx] <regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com> > wrote:

Kit Radio Company in the U.K. – their KRC-2 regenerodyne was discussed here recently. I received and answered this email today. Looks like Anthony’s email

has been hacked:

>Andy – you actually have NO friends or relatives to help you? I feel for you. But If you are actually indigent in Istanbul, you’ll know to see your U.K. ambassador or consul.

I thought you were smarter than this.

-H M

From: <mailto:kitradloco@...> kitradloco@... [mailto: <mailto:kitradloco@aol.com> kitradloco@...]
Sent: Wednesday, June 1, 2016 9:02 AM
To: <mailto:kargo_cult@...> kargo_cult@...
Subject: Re: Distressing Moment......Anthony Westbrook

Good to hear back from you.I am presently in Istanbul,Turkey with a friend of mine whose spouse recently passed on.I'm tapped out here and need a quick loan from you to clear some bills here .I promise to refund it as soon as i get back.

Tony Westbrook

-----Original Message-----
From: Hubert Miller < <mailto:kargo_cult@...> kargo_cult@...>
To: kitradloco < <mailto:kitradloco@...> kitradloco@...>
Sent: Wed, 1 Jun 2016 17:00
Subject: RE: Distressing Moment......Anthony Westbrook

What’s this about?

-H M

From: Tony Westbrook [<mailto:kitradioco@...?> mailto:kitradioco@...]
Sent: Wednesday, June 1, 2016 12:26 AM
To: <mailto:kargo_cult@...> kargo_cult@...
Subject: Distressing Moment......Anthony Westbrook

Hi,

I hope you're doing great? Actually, I'm having such a frustrating ordeal right now and need a favor from you. I'd appreciate if you could email me back asap.

Tony Westbrook

26559. Re: [regenrx] FW: Distressing Moment...at Kit Radio Company

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-01 16:59:34 UTC
From: msalbert@...
Topic: 26555 Message: 26559

There is some entertainment to be had :-) do a little googling about Istanbul, and then send the person on a wild goose chase around town. Tickets waiting for him at the airport (first class!), iTunes gift cards, Western Union offices… To quote Bugs Bunny, ain't I a Stinker :-) Regards, Mark KB9VKE -----Original Message----- From: Chris Weir chris.a.weir@... [regenrx] To: regenrx Sent: Wed, Jun 1, 2016 11:40 AM Subject: Re: [regenrx] FW: Distressing Moment...at Kit Radio Company

I would council caution - you do seem to have realised this :-) Sadly this type of email is usually a scam by someone having hacked the email. Usually money is requested via a wire transfer service & you never hear from them again. Chris.

On Wed, Jun 1, 2016 at 5:18 PM, Hubert Miller kargo_cult@... [regenrx] <regenrx@yahoogroups.com> wrote:

Kit Radio Company in the U.K. – their KRC-2 regenerodyne was discussed here recently. I received and answered this email today. Looks like Anthony’s email
has been hacked:

>Andy – you actually have NO friends or relatives to help you? I feel for you. But If you are actually indigent in Istanbul, you’ll know to see your U.K. ambassador or consul.
I thought you were smarter than this.
-H M

From: kitradloco@... [mailto:kitradloco@...] Sent: Wednesday, June 1, 2016 9:02 AM To: kargo_cult@... Subject: Re: Distressing Moment......Anthony Westbrook

Good to hear back from you.I am presently in Istanbul,Turkey with a friend of mine whose spouse recently passed on.I'm tapped out here and need a quick loan from you to clear some bills here .I promise to refund it as soon as i get back.

Tony Westbrook

-----Original Message----- From: Hubert Miller <kargo_cult@...> To: kitradloco <kitradloco@...> Sent: Wed, 1 Jun 2016 17:00 Subject: RE: Distressing Moment......Anthony Westbrook
What’s this about?

-H M

From: Tony Westbrook [mailto:kitradioco@...] Sent: Wednesday, June 1, 2016 12:26 AM To: kargo_cult@... Subject: Distressing Moment......Anthony Westbrook

Hi,

I hope you're doing great? Actually, I'm having such a frustrating ordeal right now and need a favor from you. I'd appreciate if you could email me back asap.

Tony Westbrook

26560. Re: [regenrx] B+ supply question

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-01 17:29:32 UTC
From: Leonard Meek
Topic: 26538 Message: 26560

I hate to belabor the subject, but I would think that anyone working with even moderate power transmitters would be exposed to more danger than with a little AC/DC radio. I don't personally know of anyone getting killed in either case, but there are plenty of old stories about taking a radio into the bath tub. I don't sweat the wiring in my shop because I did it myself, so I know it's correct. Additionally, I have several isolation xfmrs. One is installed in my bench with a 5A Variac and a lamp bank for use with questionable loads. One rated 15KVA powers most of my commercial receivers and helps to reduce line noise. I think a lot of guys would agree with me, but unfortunately they're no longer with us.

Leonard

----- Original Message -----
From: david.newkirk@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Wednesday, June 01, 2016 2:00 AM
Subject: Re: [regenrx] B+ supply question

Leonard wrote:

> I've been waiting for someone to bring up the subject of efficiency with back to back transformers.
> I would still like to know why 170 volts obtained this way is any less dangerous than 170 (properly
> fused) obtained right off the power line.

That's two separate questions.

Here's how this issue works for me:

1 The value of transformer isolation is isolation from hot _and_ neutral on the line and current-limiting (in the case of a secondary-side fault) by means of the impedance of the transformer.

Isolation from hot _and neutral_ matters because there are all sorts of line-side faults, including wiring by yahoos that transposes hot and neutral and including high resistance in, or outright failure of, the neutral connection. I have personal experience with failure of the neutral.

And of course transformers can also step voltages up and down as they provide that isolation. Only in this special 1:1 voltage case does transformerless operation suggest itself. (Nope, voltage multiplication does not change my position. Only an isolation transformer or transformers protect me from calamity and idiocy on the line side, and idiocy on my side.)

2 Once the life-and-property-protecting value of isolation is established, questions of efficiency are moot. (And good-quality transformers make it more so. Have you _ever_ seen catalog listings for transformers convey their efficiency? No, because for properly

applied good-quality transformers it's high. We're only powering up little regenerative receivers here!)

If you have or can buy an actual isolation transformer, fine; if not, two transformers back to back will be only slightly less efficient, especially if one is sufficiently mentally alert enough to avoid using half-wave rectification--which _very noticeably_ heats the transformer compared to the full-wave-bridge case--on the output side.

Out,

Dave
amateur radio W9BRD

26561. RE: [regenrx] Re: vintage 2H choke might be 36 gauge wire

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-01 17:37:03 UTC
From: Hubert Miller
Topic: 26507 Message: 26561

I think the high-dosage tests were not so much to predict inevitability of getting cancer as predicting incidence of cancer at lower doses.
Of course PCB is not so skin-permeable as toluene or highly refined petrochemicals and some drugs, which will go thru the skin barrier.
Yes, your chances of any problems from PCB - or your future children's problems - arise from somehow ingesting PCB, which is probably unlikely.
There are some sites in the USA where rivers or channels are still so polluted that the fauna are either gone or have serious problems.
I can think of, right off, Duwamish River in Seattle; Gowanus Canal, New York; Columbia or Willamette River, Oregon, on their last sections.
I recall seeing a photo in the Portland, Oregon newspaper of an immigrant fishing, i think in the port area, a few yards away from a big billboard warning that fish from the area were unsafe to eat.

Back in the early 1980s i had a large bunch of high voltage, transmitter type PCB oil caps. I didn't need them, and i had just read something about the danger of PCBs, and i was all unnecessarily alarmed and worked up.
I called some relevant authority and was told i could have the caps packed in 50 gallon drums and trucked to a haz waste site, at my own expense, of course. Now it's a lot easier to dispose of haz stuff. Just as well; landfills do leak, so the easiest route is not really the best for our home planet. But i'm a whole lot less concerned about the PCB caps i still have.
-Hue Miller

26562. Low voltage 1-tube 1931

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-01 19:33:44 UTC
From: Hubert Miller
Topic: 26562 Message: 26562

Going thru paper here, i saw an early article on low-voltage tube radio.
"World Radio" magazine for May 30, 1931 - published weekly then ! -

has an article on pg 10 - "A One Tube Set with 15-550 Meter Band Selector
Switch". The A batt is 3 volts and the B batt 7.5 volt, so the stacked

B+ is 10.5 volts. The circuit is also unusual in use of no plug in coils;
uses one coil with 4 taps; unused section is grounded out.

I am kind of puzzled by this statement: "The reception on short waves is
good, and that on broadcast waves is only fair. " I would have expected

it to be other way around!

-Hue Miller

it's at:

http://www.americanradiohistory.com/Archive-Radio-World/30s/31/Radio-World-1
931-May-30.pdf

26563. RE: [regenrx] Low voltage 1-tube 1931

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-01 19:45:36 UTC
From: Hubert Miller
Topic: 26562 Message: 26563

Oh ☐ i noticed something. The circuit is drawn wrong. In the magazine schematic, the var cap taps down on the coil ☐ which would only progressively lessen

the tuning range of the capacitor. The capacitor should go to the top of the coil and the taps should go to the bottom of the coil thru a shorting 4-step switch.

The circuit has a grid leak, of course, but by returning the grid to the +3 of the A battery, there is also (½ x 2) filament voltage + 1 volt fil resistor drop =

+2 volts bias on the grid in addition (or opposition) to grid leak bias.

-Hue

it☐s at:

http://www.americanradiohistory.com/Archive-Radio-World/30s/31/Radio-World-1931-May-30.pdf

–’–·–’–––

26564. Re: [regenrx] Low voltage 1-tube 1931

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-01 21:37:48 UTC
From: Michael
Topic: 26562 Message: 26564

I would avoid shorting turns of the tuning coil. Shorted turns
reduce Q. Instead, the grid-leak could be detached from the top end of
the coil and connected to the switch wiper.

One of my first ever regens worked on 22v HT. What more recent
tubes would work on 10.5 or similar B+ ?

Michael

On 01.06.16 20:45, Hubert Miller kargo_cult@... [regenrx] wrote:
>
>
> Oh ? i noticed something. The circuit is drawn wrong. In the magazine
> schematic, the var cap taps down on the coil ? which would only
> progressively lessen
>
> the tuning range of the capacitor. The capacitor should go to the top of
> the coil and the taps should go to the bottom of the coil thru a
> shorting 4-step switch.
>
> The circuit has a grid leak, of course, but by returning the grid to the
> +3 of the A battery, there is also (? x 2) filament voltage + 1 volt
> fil resistor drop =
>
> +2 volts bias on the grid in addition (or opposition) to grid leak bias.
>
> -Hue
>
> it?s at:
>
> <http://www.americanradiohistory.com/Archive-Radio-World/30s/31/Radio-World-1931-May-30.pdf>

26565. RE: [regenrx] Low voltage 1-tube 1931

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-01 23:08:12 UTC
From: Hubert Miller
Topic: 26562 Message: 26565

There was an article i saw in Radio News from around 1954 that used submini tube and one transistor. As i recall, the transistor took off from the tube cathode-follower
style. The text said the tube would regenerate down to something like 3 volts. The actual B+ and transistor supply was a 7.5 volt battery.
Oh, i just found it in my articles list:

Tube and Transistor Radio (regenerative) 6088 submini as triode; single transistor audio; 7.5 volt supply
Sep 55 p42 Radio-Electronics magazine; audio from triode cathode ckt

Then there's also this article:

A Most Unusual Oscillator (Hubbard osc, B+ less) R&TVN May 1955 52

The 'Hubbard oscillator' uses no B+; electrons are supplied only from the filament, not B+ stacked from the filament supply; in fact, the filament circuit is not connected
to the other tube elements, it's isolated, except for electrons that boil off. Some German website i saw seemed to rediscover this circuit, but this is the first instance of it
i have seen, and Mr. Hubbard deserves his credit. The circuit does need a tube with a hefty filament that runs a good bit of power, power tubes like 6V6 or 50C5.
Those articles are probably accessible via americanradiohistory.com

re the coil tap issue: this question seems to reappear perennially. Some time back i quoted this test result from QST:

Measured Q data of simulated amplifier tank inductor, tapped open or shorted comparison QST Feb 2011 62

As i recall, as shown by a chart of actual Q readings, it just did not make a substantial difference. I'm open to other opinions though
-Hue Miller

-----Original Message-----
From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Wednesday, June 1, 2016 2:38 PM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Low voltage 1-tube 1931

I would avoid shorting turns of the tuning coil. Shorted turns reduce Q. Instead, the grid-leak could be detached from the top end of the coil and connected to the switch wiper.

One of my first ever regens worked on 22v HT. What more recent tubes would work on 10.5 or similar B+ ?

Michael

On 01.06.16 20:45, Hubert Miller kargo_cult@... [regenrx] wrote:

> Oh ☐ i noticed something. The circuit is drawn wrong. In the magazine
> schematic, the var cap taps down on the coil ☐ which would only
> progressively lessen
>
> the tuning range of the capacitor. The capacitor should go to the top
> of the coil and the taps should go to the bottom of the coil thru a
> shorting 4-step switch.
>
> The circuit has a grid leak, of course, but by returning the grid to
> the
> +3 of the A battery, there is also (½ x 2) filament voltage + 1
> +volt
> fil resistor drop =
>
> +2 volts bias on the grid in addition (or opposition) to grid leak bias.
>
> -Hue
>
> it☐s at:
>
> <http://www.americanradiohistory.com/Archive-Radio-World/30s/31/Radio-
> World-1931-May-30.pdf>

"In the interest of Regenerating radio's lost art of Regeneration"

Yahoo Groups Links

26566. RE: [regenrx] Re: vintage 2H choke might be 36 gauge wire

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-02 00:52:15 UTC
From: Paul Christensen
Topic: 26507 Message: 26566

>☐So, if you get a few drops of a PCB containing product on your hands, and you wash wherever there is / was skin contact, you aren't going to die later this afternoon, or even next year, for that matter.☐

Except for those persons genetically predisposed to even a small intake of PCB whether by ingestion or skin absorption. Absent a comprehensive DNA screening, we don☐t know who among us can bath in PCBs without ill-effect, while cancer calls for the fella☐ who☐s DNA isn☐t nearly as resilient to exposure. Probably all of us are more or less predisposed to any number of cancer-causing agents including exposure to chemical carcinogens, UV, nicotine, the air, and soil. At some point, and through some method, researchers concluded that PCBs posed an elevated risk to humans.

>☐It makes for a great "scare" to make people afraid of things though.☐

It would be naïve to think that the 1980s PCB scare was the result of an outpouring of compassionate concern by state and federal health agencies. Any time big money is involved and freely available to be had, well

Paul, W9AC

On 6/1/2016 4:16 AM, 'Paul Christensen' w9ac@... <mailto:w9ac@...> [regenrx] wrote:

>☐I gather that you want the supply to look as it did in its heyday. Otherwise you'd use modern electrolytic caps--seriesed and with equalizing resistors as necessary--and be done with it.☐

That was my first thought, but couldn☐t bring myself to using ☐lytics in this instance. Although, if it was the last available port in a storm

While working with the older oil caps, I☐ve been using surgical gloves to keep the PCB-infested oil from making skin contact. In a prior working life, our company had to dispose of several hundred pounds of GE Pyranol-branded caps. Removal was very expensive and was facilitated though a GE-licensed contractor. Makes me wonder how many OT ops thought nothing about coming into contact with capacitor and transformer oil. They didn☐t fear exposed HV so why oil?

Several sets of caps are due to arrive next week and I☐ll likely make a final decision at that time. Of course, the new oil caps don☐t contain PCBs but they may have to be kludged into the compartment.

Excellent point about selecting caps with some WVDC headroom. It would be an interesting discussion with James Millen since he likely contributed to the electrical, as well as mechanical PS design.

Paul, W9AC

26567. why are we questioning PCBs

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-02 01:40:27 UTC
From: Rob
Topic: 26507 Message: 26567

Why are we questioning PCBs?

I have attended no less than 3 funerals for people who died at ages 30,
40 and 67 of horrible cancer deaths.
Two of those people smoked and died of lung cancer.

If science says it causes cancer
it probably will kill you so lets not discount the hazards of PCBs.

This discussion started with talking about capacitors that can not be
bought now.

Its easy enough to hand craft antique faux electronic parts:

http://www.learnmorsecode.com/help/burgess.html

On 06/01/2016 08:52 PM, 'Paul Christensen' w9ac@... [regenrx] wrote:

26568. modern 2 H choke physical size is smaller

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-02 03:05:07 UTC
From: Rob
Topic: 26507 Message: 26568

Very surprised to see brand new hammond choke arrive in a tiny box
compared to vintage 2H choke:

http://www.learnmorsecode.com/regenx/choke/chokes1.jpg
http://www.learnmorsecode.com/regenx/choke/chokes2.jpg

26569. Re: [regenrx] why are we questioning PCBs

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-02 04:33:42 UTC
From: Leonard Meek
Topic: 26507 Message: 26569
Attachments: 1 described; binary payloads are missing from this source WARC

Rob, Thanks for the link to the Burgess battery scans. Here's some repro Burgess batteries I put together a while back:

Leonard

26570. FAUX BURGESS batteries I still have a 1,000 of the red shield cards to glue onto them

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-02 06:15:45 UTC
From: Rob
Topic: 26507 Message: 26570

Pretty batteries.

I still have a 1,000 of the red shield cards to glue onto B batteries if
anyone wants some I'll throw some in the mail.
http://www.learnmorsecode.com/help/burgess.html

What did you use for the round discs? Wood?

I bought two of my favorite craft materials from Walmart today.
First being metal..... the largest cookie sheet you can buy at Walmart.
Cost $9. Same amount of metal at LOWES costs $25

2nd....
hardboard clipboards. The cheapest kind...$2
I don't know what the clipboard is made of but it is cheap and durable
and machinable.

On 06/02/2016 12:33 AM, 'Leonard Meek' lemeek@... [regenrx]
wrote:
>
> Rob, Thanks for the link to the Burgess battery scans. Here's some
> repro Burgess batteries I put together a while back:
>

26571. 50pF variable cap at EG

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-02 13:50:57 UTC
From: msalbert@...
Topic: 26571 Message: 26571

Found this Johnson air variable cap on line which may be of interest.
http://www.goldmine-elec-products.com/prodinfo.asp?number=G21339&mc_cid=1c4781ac34&mc_eid=073d97384e

Doesn't take knobs, though maybe you could figure something out.
No interest in the company, just a satisfied customer.

Regards,
Mark KB9VKE

26572. Re: [regenrx] FAUX BURGESS batteries I still have a 1,000 of the red shield cards to glue onto them

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-02 17:26:55 UTC
From: Leonard Meek
Topic: 26507 Message: 26572

Rob, the round disks were some kind of red fiberboard I found in my junk box. The #6 dry cells are filled with "C" cells. The large 45V battery is 30 AA cells. The smaller one is five 9V batteries.I'm using them right now to test some submini tubes with numbers that don't cross to anything. Some are proximity fuze tubes, others I suspect are old hearing aid tubes, I'm testing them in actual circuits to see what they'll do.

Leonard

----- Original Message -----
From: Rob roomberg@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Wednesday, June 01, 2016 8:15 PM
Subject: [regenrx] FAUX BURGESS batteries I still have a 1,000 of the red shield cards to glue onto them

Pretty batteries.

I still have a 1,000 of the red shield cards to glue onto B batteries if anyone wants some I'll throw some in the mail.
http://www.learnmorsecode.com/help/burgess.html

What did you use for the round discs? Wood?

I bought two of my favorite craft materials from Walmart today.
First being metal..... the largest cookie sheet you can buy at Walmart.
Cost $9. Same amount of metal at LOWES costs $25

2nd....
hardboard clipboards. The cheapest kind...$2
I don't know what the clipboard is made of but it is cheap and durable and machinable.

On 06/02/2016 12:33 AM, 'Leonard Meek' lemeek@... [regenrx] wrote:

Rob, Thanks for the link to the Burgess battery scans. Here's some repro Burgess batteries I put together a while back:

26573. Re: [regenrx] FAUX BURGESS batteries I still have a 1,000 of the red shield cards to glue onto them

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-02 20:41:10 UTC
From: Gary Pewitt
Topic: 26507 Message: 26573

Rob, could I have a couple please? Thanks Gary N9ZSV
Gary Pewitt
1500 French Prairie Rd
Booneville, AR 72927

On 06/02/2016 01:15 AM, Rob roomberg@... [regenrx] wrote:
>
> Pretty batteries.
>
> I still have a 1,000 of the red shield cards to glue onto B batteries
> if anyone wants some I'll throw some in the mail.
> http://www.learnmorsecode.com/help/burgess.html
>
> What did you use for the round discs? Wood?
>
> I bought two of my favorite craft materials from Walmart today.
> First being metal..... the largest cookie sheet you can buy at Walmart.
> Cost $9. Same amount of metal at LOWES costs $25
>
> 2nd....
> hardboard clipboards. The cheapest kind...$2
> I don't know what the clipboard is made of but it is cheap and durable
> and machinable.
>
>
> On 06/02/2016 12:33 AM, 'Leonard Meek' lemeek@...
> [regenrx] wrote:
>>
>> Rob, Thanks for the link to the Burgess battery scans. Here's some
>> repro Burgess batteries I put together a while back:
>>
>
>

26574. Re: [regenrx] FAUX BURGESS batteries I still have a 1,000 of the red shield cards to glue onto them

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-03 00:16:02 UTC
From: Rob
Topic: 26507 Message: 26574

Will be mailed tomorrow.

On 06/02/2016 04:41 PM, Gary Pewitt garypewitt@... [regenrx]
wrote:
>
> Rob, could I have a couple please? Thanks Gary N9ZSV
> Gary Pewitt
> 1500 French Prairie Rd
> Booneville, AR 72927
>
>
>
> On 06/02/2016 01:15 AM, Rob roomberg@... [regenrx] wrote:
>>
>> Pretty batteries.
>>
>> I still have a 1,000 of the red shield cards to glue onto B batteries
>> if anyone wants some I'll throw some in the mail.
>> http://www.learnmorsecode.com/help/burgess.html
>>
>> What did you use for the round discs? Wood?
>>
>> I bought two of my favorite craft materials from Walmart today.
>> First being metal..... the largest cookie sheet you can buy at Walmart.
>> Cost $9. Same amount of metal at LOWES costs $25
>>
>> 2nd....
>> hardboard clipboards. The cheapest kind...$2
>> I don't know what the clipboard is made of but it is cheap and
>> durable and machinable.
>>
>>
>> On 06/02/2016 12:33 AM, 'Leonard Meek' lemeek@...
>> [regenrx] wrote:
>>>
>>> Rob, Thanks for the link to the Burgess battery scans. Here's some
>>> repro Burgess batteries I put together a while back:
>>>
>>
>
>

26575. Re: [regenrx] FAUX BURGESS batteries I still have a 1,000 of the red shield cards to glue onto them

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-03 00:32:35 UTC
From: Gary Pewitt
Topic: 26507 Message: 26575

Thank you much. 73 Gary

On 06/02/2016 07:16 PM, Rob roomberg@... [regenrx] wrote:
>
> Will be mailed tomorrow.
>
>
>
>
>
> On 06/02/2016 04:41 PM, Gary Pewitt garypewitt@...
> [regenrx] wrote:
>>
>> Rob, could I have a couple please? Thanks Gary N9ZSV
>> Gary Pewitt
>> 1500 French Prairie Rd
>> Booneville, AR 72927
>>
>>
>>
>> On 06/02/2016 01:15 AM, Rob roomberg@... [regenrx] wrote:
>>>
>>> Pretty batteries.
>>>
>>> I still have a 1,000 of the red shield cards to glue onto B
>>> batteries if anyone wants some I'll throw some in the mail.
>>> http://www.learnmorsecode.com/help/burgess.html
>>>
>>> What did you use for the round discs? Wood?
>>>
>>> I bought two of my favorite craft materials from Walmart today.
>>> First being metal..... the largest cookie sheet you can buy at Walmart.
>>> Cost $9. Same amount of metal at LOWES costs $25
>>>
>>> 2nd....
>>> hardboard clipboards. The cheapest kind...$2
>>> I don't know what the clipboard is made of but it is cheap and
>>> durable and machinable.
>>>
>>>
>>> On 06/02/2016 12:33 AM, 'Leonard Meek' lemeek@...
>>> [regenrx] wrote:
>>>>
>>>> Rob, Thanks for the link to the Burgess battery scans. Here's some

>>>> repro Burgess batteries I put together a while back:
>>>>
>>>
>>
>
>

26576. FAUX BURGESS batteries I still have a 1,000 of the red shield cards to glue onto them

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-03 02:15:05 UTC
From: Rob
Topic: 26507 Message: 26576

I dunno guys..... maybe something to this... maybe not.....
the two guys asking for the cards to make faux batteries are

Gary Pewitt

and

Jim Pruitt

Not sure what that means.... but I did play the lottery and won $15 today.

>>> On 06/02/2016 01:15 AM, Rob roomberg@... [regenrx] wrote:
>>>>
>>>> Pretty batteries.
>>>>
>>>> I still have a 1,000 of the red shield cards to glue onto B
>>>> batteries if anyone wants some I'll throw some in the mail.
>>>> http://www.learnmorsecode.com/help/burgess.html
>>>>
>>>> What did you use for the round discs? Wood?
>>>>
>>>> I bought two of my favorite craft materials from Walmart today.
>>>> First being metal..... the largest cookie sheet you can buy at Walmart.
>>>> Cost $9. Same amount of metal at LOWES costs $25
>>>>
>>>> 2nd....
>>>> hardboard clipboards. The cheapest kind...$2
>>>> I don't know what the clipboard is made of but it is cheap and
>>>> durable and machinable.
>>>>

26577. Question on coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-03 18:34:35 UTC
From: Leonard Meek
Topic: 26577 Message: 26577

I'm not a scientist but I have dabbled a bit in particle physics and ditch digging. I have a bunch of RF coils that I don't fully understand. The secondary is about 330uH, which is about what you would expect for MW use. The primary is over 7000uH. That's the way they're marked on the little data sheet that comes with them. Is there a simple explanation for this?

Leonard

26578. Re: Question on coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-05 00:54:17 UTC
From: b_weeber@...
Topic: 26577 Message: 26578

Together with a 1nF capacitor parallel to 7mH that coils could be used for a 60 kHz second if.

26579. Re: [regenrx] Re: Question on coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-05 04:25:47 UTC
From: Leonard Meek
Topic: 26577 Message: 26579

According to the data sheet it's a PC-70-RF coil, and I think it was sold as an antenna coil. I thought maybe it was intended for solid state but the accompanying diagram shows a pentagrid tube.

Leonard

----- Original Message -----
From: b_weeber@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Saturday, June 04, 2016 2:54 PM
Subject: [regenrx] Re: Question on coils

Together with a 1nF capacitor parallel to 7mH that coils could be used for a 60 kHz second if.

26580. New Member, Founder of the International Vacuum Tube Museum

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-05 23:25:45 UTC
From: vacuumtubemuseum@...
Topic: 26580 Message: 26580

This is an interesting group, and I hope the members who are passionate about tubes can help me with the Museum https://groups.yahoo.com/neo/groups/RadioModifications/conversations/www.vacuumtubemuseum.org.

There are many collectors and other organizations with various tube-oriented websites and a few with physical collections, but the International Vacuum Tube Museum is the only formal vacuum tube museum organization worldwide. It is a true museum, dedicated to the past, present, and future history of vacuum tubes, and devoted to the collection, study, education, exhibition, research, conservation, interpretation, preservation and documentation of vacuum tubes and vacuum tube artifacts.

It will take quite a while and many projects to build this into a first class Museum. I have made a lot of progress, especially over the past couple of years. With a very little amount of help, I set up the Museum as a 501(c)(3) nonprofit so that all memberships and donations are tax-deductible contributions to the Museum. Over several decades, I collected thousands of tubes and hundreds of tube radios, test instruments and all sorts of other tube-based gear, and dozens of books, magazines, manuals, spec sheets, brochures, catalogs and countless other print literature and documents. I spent my own money to cover more than 90% of all the expenses to get the Museum to this point. I recently snagged a donation for some temporary space and am finishing a nice gallery. You can see photos here http://vacuumtubemuseum.org/new-gallery/. Unfortunately, this only shows a small portion of the tubes and tube-based radios, tube-based test equipment, and other tube gear that is in storage. The Museum needs more space!

Of course the main goal is to preserve the history and showcase “all things vacuum tube” either in the Museum’s collections, or with links with other museums, libraries, corporate galleries, personal collections, etc.

All of this will take years. And help from hundreds of people and organizations. And money. I am counting on help from people who are passionate about tubes and everything based on tubes.

Please…

Join http://vacuumtubemuseum.org/join/ and become a Member Donate http://vacuumtubemuseum.org/contribute-to-history/tubes, new or used, wonderfully weird tubes or everyday tubes, huge or tiny, and duplicates are just as important… there are so many to preserve & restore Donate http://vacuumtubemuseum.org/donate/cash, even small contributions help Donate radios, test gear, any of the countless other things that would not exist without tubes Donate books, newsletters, reports, schematics, manuals, films, monographs, texts, posters, artwork, and every other type of documents Donate articles for the Filling the Vacuum http://vacuumtubemuseum.org/filling-the-vacuum/ magazine Volunteer Join the committees Become a columnist for the Filling the Vacuum magazine Help write the definitive histories Help assemble the databases, all the websites, all the people, all the books… everything about tubes
Look at the website. Download and read the Filling the Vacuum

http://vacuumtubemuseum.org/filling-the-vacuum/ magazine. Send me ideas, complaints, suggestions, introductions. Help show the incredible contributions of tubes, without which there would be no radio, no television, no radar, no cell phones, no microwaves… no electronics of any kinds.

Charles F. Bacon, Keeper of the Vision
International Vacuum Tube Museum http://www.vacuumtubemuseum.org
http://vacuumtubemuseum.org/filling-the-vacuum/
Filling the Vacuum http://vacuumtubemuseum.org/filling-the-vacuum/ Filling the Vacuum* Celebrating the History, Beauty and Science of Tubes The magazine of the International Vacuum Tube Museum… Dedicated to the Past,...

View on vacuumtubemuseu... http://vacuumtubemuseum.org/filling-the-vacuum/
Preview by Yahoo

26581. Transceiver build with regen completed

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-06 10:39:09 UTC
From: dulmagedon@...
Topic: 26581 Message: 26581
Attachments: 1 described; binary payloads are missing from this source WARC

I am easily distracted and was by a mention some where of the old Weskit BN-1 transceiver. I decided to build a clone but dint have a 3a5tube and didnt want crystal control on the TX side. I did however look at the schematic to see how they did it. I know some will poo poo the concept however I heard from a couple of fellows who still have theirs from the 1950s and loved them. Usually those with like and thse wthout know why they are no good. Strange concept but that's life it seems. Anyway I decided to design my own using mostly what I had on hand. Once I got it going i made a tube change to an ECC832 /12DW7(Thank you Tubemuseum for the info) which is a dissimilar dual triode. After I got it going I added a audio amp to the regen to help these failing ears. It works quite well. There is no schematic because it is just two indentical hartley osc, one as a transmitter and one with a regen pot and phones. The audio amp is nothing fancy. Typical bean power amp. A half dozen parts and some wire. Resistance coupled. Radio is not hand sensitive and tuning is very comfortable. Tx and RX are single tuned with a dual gang variable cap. RX has a bandspread added for sweeping up and down on freq and Tx has a padder to keep it equal tuning rate to RX. Slugs are set so with bandspread in centre or half way RX and TX are on the same freq. The hartley Regen lends itself to use with a bigger antenna so one antenna s used and switched along with B plus for TX or Rx. It is powered by my shack light duty hb PSU and hum is not an issue. It can hear weak station very well. better then my Dx160 Con receiver. Fun build and fun to run. The finished set is quite a bit different then the BN-1 Weskit but the concept is stolen directly from looking into that little amazing radio. I call mine the DN-1 for Don 1.
donVE3LYX

26582. Re: [regenrx] Transceiver build with regen completed [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-06 13:56:21 UTC
From: R. Urbaytis
Topic: 26581 Message: 26582

Looks like a fun build, how about a schematic and coil / build notes...Ron K9RWU

On Monday, June 6, 2016 6:39 AM, "dulmagedon@... [regenrx]" <regenrx@yahoogroups.com> wrote:

I am easily distracted and was by a mention some where of the old Weskit BN-1 transceiver. I decided to build a clone but dint have a 3a5tube and didnt want crystal control on the TX side. I did however look at the schematic to see how they did it. I know some will poo poo the concept however I heard from a couple of fellows who still have theirs from the 1950s and loved them. Usually those with like and thse wthout know why they are no good. Strange concept but that's life it seems. Anyway I decided to design my own using mostly what I had on hand. Once I got it going i made a tube change to an ECC832 /12DW7(Thank you Tubemuseum for the info) which is a dissimilar dual triode. After I got it going I added a audio amp to the regen to help these failing ears. It works quite well. There is no schematic because it is just two indentical hartley osc, one as a transmitter and one with a regen pot and phones. The audio amp is nothing fancy. Typical bean power amp. A half dozen parts and some wire. Resistance coupled. Radio is not hand sensitive and tuning is very comfortable. Tx and RX are single tuned with a dual gang variable cap. RX has a bandspread added for sweeping up and down on freq and Tx has a padder to keep it equal tuning rate to RX. Slugs are set so with bandspread in centre or half way RX and TX are on the same freq. The hartley Regen lends itself to use with a bigger antenna so one antenna s used and switched along with B plus for TX or Rx. It is powered by my shack light duty hb PSU and hum is not an issue. It can hear weak station very well. better then my Dx160 Con receiver. Fun build and fun to run. The finished set is quite a bit different then the BN-1 Weskit but the concept is stolen directly from looking into that little amazing radio. I call mine the DN-1 for Don 1.
donVE3LYX

26583. Re: [regenrx] Transceiver build with regen completed

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-06 15:23:57 UTC
From: Rob
Topic: 26581 Message: 26583

Yes.....schematic and coil would be very helpful.

I was surprised by the wire gauge on the coils.
I thought we were supposed to be using thin magnet wire for the coils.

On 06/06/2016 09:56 AM, 'R. Urbaytis' urbieman@... [regenrx] wrote:
> Looks like a fun build, how about a schematic and coil / build notes...
> Ron K9RWU
>
>
> On Monday, June 6, 2016 6:39 AM, "dulmagedon@... [regenrx]"
> <regenrx@yahoogroups.com> wrote:
>
>
> I am easily distracted and was by a mention some where of the old
> Weskit BN-1 transceiver. I decided to build a clone but dint have a
> 3a5tube and didnt want crystal control on the TX side. I did however
> look at the schematic to see how they did it. I know some will poo poo
> the concept however I heard from a couple of fellows who still have
> theirs from the 1950s and loved them. Usually those with like and thse
> wthout know why they are no good. Strange concept but that's life it
> seems. Anyway I decided to design my own using mostly what I had on
> hand. Once I got it going i made a tube change to an ECC832
> /12DW7(Thank you Tubemuseum for the info) which is a dissimilar dual
> triode. After I got it going I added a audio amp to the regen to help
> these failing ears. It works quite well. There is no schematic because
> it is just two indentical hartley osc, one as a transmitter and one
> with a regen pot and phones. The audio amp is nothing fancy. Typical
> bean power amp. A hal f dozen parts and some wire. Resistance coupled.
> Radio is not hand sensitive and tuning is very comfortable. Tx and RX
> are single tuned with a dual gang variable cap. RX has a bandspread
> added for sweeping up and down on freq and Tx has a padder to keep it
> equal tuning rate to RX. Slugs are set so with bandspread in centre or
> half way RX and TX are on the same freq. The hartley Regen lends
> itself to use with a bigger antenna so one antenna s used and switched
> along with B plus for TX or Rx. It is powered by my shack light duty
> hb PSU and hum is not an issue. It can hear weak station very well.
> better then my Dx160 Con receiver. Fun build and fun to run. The
> finished set is quite a bit different then the BN-1 Weskit but the
> concept is stolen directly from looking into that little amazing
> radio. I call mine the DN-1 for Don 1.
> donVE3LYX
>
>
>

>

26584. RE: [regenrx] Transceiver build with regen completed

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-06 17:21:43 UTC
From: Hubert Miller
Topic: 26581 Message: 26584

One clever point about the BN-1 is that the transmit-receive switching is done by simply switching the halves of the 3A5 filament getting current.

The worst downside is the tuning rate. If you are used to maybe 40 kHz per knob turn, the BN-1 is something like 4 MHz per knob turn.

-Hue

26585. Re: [regenrx] New Member, Founder of the International Vacuum Tube Museum

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-06 18:38:03 UTC
From: Leonard Meek
Topic: 26580 Message: 26585

Welcome, Charles. I like working with tubes, but I'm far from being any kind of expert on them. I've accumulted some tubes over the years and now I'm trying to find uses for them. I have a number of submini tubed that I've been experimenting with that have no ID numbers on them or have numbers that don't cross to anything. Some are proximity fuze tubes, others are probably hearing aid tubes. If you go to the RegenRX 2, Files section under Leonardmeek, and look at my Mk.19 schematic, you can see what I'm doing. It would be nice to have a little more data on these tubes.

Leonard

----- Original Message -----
From: vacuumtubemuseum@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Sunday, June 05, 2016 1:25 PM
Subject: [regenrx] New Member, Founder of the International Vacuum Tube Museum

This is an interesting group, and I hope the members who are passionate about tubes can help me with the Museum.

There are many collectors and other organizations with various tube-oriented websites and a few with physical collections, but the International Vacuum Tube Museum is the only formal vacuum tube museum organization worldwide. It is a true museum, dedicated to the past, present, and future history of vacuum tubes, and devoted to the collection, study, education, exhibition, research, conservation, interpretation, preservation and documentation of vacuum tubes and vacuum tube artifacts.

It will take quite a while and many projects to build this into a first class Museum. I have made a lot of progress, especially over the past couple of years. With a very little amount of help, I set up the Museum as a 501(c)(3) nonprofit so that all memberships and donations are tax-deductible contributions to the Museum. Over several decades, I collected thousands of tubes and hundreds of tube radios, test instruments and all sorts of other tube-based gear, and dozens of books, magazines, manuals, spec sheets, brochures, catalogs and countless other print literature and documents. I spent my own money to cover more than 90% of all the expenses to get the Museum to this point. I recently snagged a donation for some temporary space and am finishing a nice gallery. You can see photos here. Unfortunately, this only shows a small portion of the tubes and tube-based radios, tube-based test equipment, and other tube gear that is in storage. The Museum needs more space!

Of course the main goal is to preserve the history and showcase “all things vacuum tube” either in the Museum’s collections, or with links with other museums, libraries, corporate galleries, personal collections, etc.

All of this will take years. And help from hundreds of people and organizations. And money. I am counting on help from people who are passionate about tubes and everything based on

tubes.

Please…

a.. Join and become a Member
b.. Donate tubes, new or used, wonderfully weird tubes or everyday tubes, huge or tiny, and duplicates are just as important… there are so many to preserve & restore
c.. Donate cash, even small contributions help
d.. Donate radios, test gear, any of the countless other things that would not exist without tubes
e.. Donate books, newsletters, reports, schematics, manuals, films, monographs, texts, posters, artwork, and every other type of documents
f.. Donate articles for the Filling the Vacuum magazine
g.. Volunteer
h.. Join the committees
i.. Become a columnist for the Filling the Vacuum magazine
j.. Help write the definitive histories
k.. Help assemble the databases, all the websites, all the people, all the books… everything about tubes

Look at the website. Download and read the Filling the Vacuum magazine. Send me ideas, complaints, suggestions, introductions. Help show the incredible contributions of tubes, without which there would be no radio, no television, no radar, no cell phones, no microwaves… no electronics of any kinds.

Charles F. Bacon, Keeper of the Vision
International Vacuum Tube Museum

Filling the Vacuum
Filling the Vacuum* Celebrating the History, Beauty and Science of Tubes The magazine of the International Vacuum Tube Museum… Dedicated to the Past,...
View on vacuumtubemuseu...
Preview by Yahoo

26586. Re: [regenrx] Transceiver build with regen completed

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-06 18:42:01 UTC
From: dulmagedon@...
Topic: 26581 Message: 26586

we were supposed

Says who?
I had no schematic. It is a pair of hartleys. I had to draw the circuit from memory when I wrote my license many years ago. I assume you all did too. Coils can be what ever band you wish. For 40M double the freq + approx number of turns. (7 MHZ = 14 turns. I sometimes use 16 just to be sure on small forms but it usually works on any size between 1/2 and 1 1/4")
Using the insulated solid hookup wire for coils gives one automatic perfect spacing. Simple but very effective. I use it when ever I can. The regen works very well.
donVe3LYX

26587. RE: [regenrx] Transceiver build with regen completed

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-06 18:46:47 UTC
From: dulmagedon@...
Topic: 26581 Message: 26587

Well both the main tuning cap and the rec bandspread have 6 to 1 reduction so I can walk all around a signal without losing it stopping where I like it best. I nixed the switiching filaments in favour of switching B + along with the antenna to the antenna coupling links. Either tx link or rx link. .
donVe3LYX

26588. Re: [regenrx] New Member, Founder of the International Vacuum Tube Museum

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-06 19:08:22 UTC
From: vacuumtubemuseum@...
Topic: 26580 Message: 26588

Hello Leonard,

I will take a look, and see what I can do to help you.

Charles

26589. Re: [regenrx] Transceiver build with regen completed

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-06 19:56:16 UTC
From: msalbert@...
Topic: 26581 Message: 26589

the schematic of the original BN1 is here.
http://www.nt9k.com/stuff/BN1schematic.gif

Yah, I like the TR switching! I don't see a direct connection from the antenna to the receiver side; I suppose the few pF needed are provided by stray capacitance between the tube halves?
Regards,
Mark KB9VKE

26590. RE: [regenrx] Transceiver build with regen completed

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-06 20:09:33 UTC
From: Hubert Miller
Topic: 26581 Message: 26590

That’s exactly it. Also if i recall from the instructions, the regeneration changed slightly when you tuned the receiver to the transmitter crystal frequency,

so that was a kind of ‘netting’ feature, in a way.

The switched filament idea, i think the designer got from a U.S. Navy aviator rescue walkie talkie WW2.

-Hue

>the schematic of the original BN1 is here.

<http://www.nt9k.com/stuff/BN1schematic.gif> http://www.nt9k.com/stuff/BN1schematic.gif

Yah, I like the TR switching! I don't see a direct connection from the antenna to the receiver side; I suppose the few pF needed are provided by stray capacitance between the tube halves?

Regards,

Mark KB9VKE

26591. FS: Antique Micromatch SWR-Power Meter, 1947

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-06 21:02:18 UTC
From: Bry Carling
Topic: 26591 Message: 26591

FOR SALE:

This is a true collectors item if ever there was!
1947 Micromatch SWR / Power Meter as described in QST Magazine for April 1947 Pages 15-20.

Measures SWR, Power Ratio (!) and also Power - forward and reflected in Watts.

Can be used for several different transmission line impedances from 50 to 300 ohms!

There are two SO239 connectors for input / output and associated banana jack / binding posts.

It's hard to tell whether this unit is commercially produced (sure looks like it) or something home brew.
It may even be the exact unit that was built for the article. In any event it comes with documentation.

Pictures and details at:
http://af4k.com/miscpart.htm

Available for $60.00 plus shipping.

26592. Re: [regenrx] New Member, Founder of the International Vacuum Tube Museum

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-06 21:12:57 UTC
From: Leonard Meek
Topic: 26580 Message: 26592

Thanks, Charles. Right now I'm just breadboarding circuits and varying circuit values to see what I can get away with. I note that most of the battery operated subminis have 1.25V filaments, but a few filaments are 0.65V. I have literature on proximity fuzes but I haven't found any mention of filament voltage. I took a chance with 1.5V and it seems to work okay, but lights up quite brightly. In my Mk.19 I connected 2 filaments in series across 1.5V and they still work very well.

Leonard

----- Original Message -----
From: vacuumtubemuseum@... [regenrx]
To: regenrx@...m
Sent: Monday, June 06, 2016 9:08 AM
Subject: Re: [regenrx] New Member, Founder of the International Vacuum Tube Museum

Hello Leonard,

I will take a look, and see what I can do to help you.

Charles

26593. Re: New Member, Founder of the International Vacuum Tube Museum

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-06 22:28:33 UTC
From: vacuumtubemuseum@...
Topic: 26580 Message: 26593

Leonard,

I looked at that link, but could not find the 19. Below is what I can see. Please let me know how to see the Mk 19 file.

Charles

Mk 15
Mk 23
Mk. 21
Mk. 25
Mk. 7
Mk.14
Mk.27
Mk.28
Mk.8

26594. Re: [regenrx] Re: New Member, Founder of the International Vacuum Tube Museum

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-07 01:28:39 UTC
From: Leonard Meek
Topic: 26580 Message: 26594

It's in the RegenRX 2 (overflow) files,. not RegenRX files. I think it's a separate group, formed to handle the overflow from RegenRX. I used 3 submini tubes: one 6088 and two 1268's (?). I don't remember where I got the 1268 number from but I think it was from an article on Sylvania tubes. I bought 100 of them for $1. Couldn't go wrong. I also got 100 diodes (1068) and 100 thyratrons (1168), each for $1. ($3 total)

Leonard

----- Original Message -----
From: vacuumtubemuseum@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Monday, June 06, 2016 12:28 PM
Subject: [regenrx] Re: New Member, Founder of the International Vacuum Tube Museum

Leonard,

I looked at that link, but could not find the 19. Below is what I can see. Please let me know how to see the Mk 19 file.

Charles

Mk 15

Mk 23

Mk. 21

Mk. 25

Mk. 7

Mk.14

Mk.27

Mk.28

Mk.8

26595. Transceiver build with regen completed re: solid hookup wire for coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-07 02:58:13 UTC
From: Rob
Topic: 26581 Message: 26595

I am 56 years old. I got licensed in 1998 and upgraded to General in 2000.
I had to pass 5 WPM to get on HF and I had to pass 13WPM CW to become a
General
BUT
I never had to draw any circuits for any of my exams.
Looking back I wish it were a requirement to learn more than being an
appliance operator.

On 06/06/2016 02:42 PM, dulmagedon@... [regenrx] wrote:
>
> we were supposed
>
> Says who?
> I had no schematic. It is a pair of hartleys. I had to draw the
> circuit from memory when I wrote my license many years ago. I assume
> you all did too. Coils can be what ever band you wish. For 40M double
> the freq + approx number of turns. (7 MHZ = 14 turns. I sometimes use
> 16 just to be sure on small forms but it usually works on any size
> between 1/2 and 1 1/4") Using the insulated solid hookup wire for
> coils gives one automatic perfect spacing. Simple but very effective.
> I use it when ever I can. The regen works very well.
> donVe3LYX
>

26596. can the MK19 1268 and 6088 tubes be swapped with 6418 tubes?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-07 03:03:08 UTC
From: Rob
Topic: 26580 Message: 26596

I have some 6088 and 6418 tubes here.
My interest in them was the non-lethal voltages.

Can the MK19 1268 and 6088 tubes be swapped with 6418 tubes?
Is there a picture of the built radio?

On 06/06/2016 09:28 PM, 'Leonard Meek' lemeek@... [regenrx]
wrote:
>
> □
>
> *It's in the RegenRX _2_ (overflow) files,. not RegenRX files. I think
> it's a separate group, formed to handle the overflow from RegenRX. I
> used 3 submini tubes: one 6088 and two 1268's (?). I don't remember
> where I got the 1268 number from but I think it was from an article on
> Sylvania tubes. I bought 100 of them for $1. Couldn't go wrong. I also
> got 100 diodes (1068) and 100 thyratrons (1168), each for $1. ($3 total)*
> **
> *Leonard*
> **
>
> ----- Original Message -----
> *From:* vacuumtubemuseum@... [regenrx]
> <mailto:vacuumtubemuseum@...%20[regenrx]>
> *To:* regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>
> *Sent:* Monday, June 06, 2016 12:28 PM
> *Subject:* [regenrx] Re: New Member, Founder of the International
> Vacuum Tube Museum
>
> Leonard,
>
> I looked at that link, but could not find the 19. Below is what I
> can see. Please let me know how to see the Mk 19 file.
>
> Charles
>
> Mk 15
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> Mk 23
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> Mk. 21
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> Mk. 25
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> Mk. 7

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> Mk.14
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> Mk.28
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> Mk.8
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26597. Re: [regenrx] can the MK19 1268 and 6088 tubes be swapped with 6418 tubes?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-07 04:57:19 UTC
From: Leonard Meek
Topic: 26580 Message: 26597

Rob, I'm sure the tubes can be swapped, with maybe a little tweaking of component values. When I built the Mk.19, I just guessed at the values. There are some pics in the Photo section of RegenRx. I used a loop stick so it didn't need an outside antenna.

Leonard

----- Original Message -----
From: Rob roomberg@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Monday, June 06, 2016 5:03 PM
Subject: [regenrx] can the MK19 1268 and 6088 tubes be swapped with 6418 tubes?

I have some 6088 and 6418 tubes here.
My interest in them was the non-lethal voltages.

Can the MK19 1268 and 6088 tubes be swapped with 6418 tubes?
Is there a picture of the built radio?

On 06/06/2016 09:28 PM, 'Leonard Meek' lemeek@hawaiiantel.net [regenrx] wrote:

☐

It's in the RegenRX 2 (overflow) files,. not RegenRX files. I think it's a separate group, formed to handle the overflow from RegenRX. I used 3 submini tubes: one 6088 and two 1268's (?). I don't remember where I got the 1268 number from but I think it was from an article on Sylvania tubes. I bought 100 of them for $1. Couldn't go wrong. I also got 100 diodes (1068) and 100 thyratrons (1168), each for $1. ($3 total)

Leonard

----- Original Message -----
From: vacuumtubemuseum@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Monday, June 06, 2016 12:28 PM
Subject: [regenrx] Re: New Member, Founder of the International Vacuum Tube Museum

Leonard,

I looked at that link, but could not find the 19. Below is what I can see. Please let me know how to see the Mk 19 file.

Charles

Mk 15

Mk 23

Mk. 21

Mk. 25

Mk. 7

Mk.14

Mk.27

Mk.28

Mk.8

26598. Re: [regenrx] can the MK19 1268 and 6088 tubes be swapped with 6418 tubes?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-07 05:06:50 UTC
From: Rob
Topic: 26580 Message: 26598

COOL
thanks

On 06/07/2016 12:57 AM, 'Leonard Meek' lemeek@... [regenrx]
wrote:
>
> □
>
> Rob, I'm sure the tubes can be swapped, with maybe a little tweaking
> of component values. When I built the Mk.19, I just guessed at the
> values. There are some pics in the Photo section of *RegenRx. *I used
> a loop stick so it didn't need an outside antenna.
> Leonard
>
> ----- Original Message -----
> *From:* Rob roomberg@... [regenrx]
> <mailto:roomberg@...%20[regenrx]>
> *To:* regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>
> *Sent:* Monday, June 06, 2016 5:03 PM
> *Subject:* [regenrx] can the MK19 1268 and 6088 tubes be swapped
> with 6418 tubes?
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> Can the MK19 1268 and 6088 tubes be swapped with 6418 tubes?
> Is there a picture of the built radio?
>
>
> On 06/06/2016 09:28 PM, 'Leonard Meek' lemeek@...
> [regenrx] wrote:
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>> □
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>> $1. Couldn't go wrong. I also got 100 diodes (1068) and 100
>> thyratrons (1168), each for $1. ($3 total)*
>> **
>> *Leonard*

>> **
>>
>> ----- Original Message -----
>> *From:* vacuumtubemuseum@yahoo.com [regenrx]
>> <mailto:vacuumtubemuseum@...%20[regenrx]>
>> *To:* regenrx@yahoogroups.com
>> *Sent:* Monday, June 06, 2016 12:28 PM
>> *Subject:* [regenrx] Re: New Member, Founder of the
>> International Vacuum Tube Museum
>>
>> Leonard,
>>
>> I looked at that link, but could not find the 19. Below is
>> what I can see. Please let me know how to see the Mk 19 file.
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>> Charles
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>> Mk 15
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26599. Re: [regenrx] Current licensing system and learning (long) Transceiver build with regen completed re: solid hookup wire for coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-07 07:01:04 UTC
From: kevin asato
Topic: 26599 Message: 26599

The exam is not an end to learning. It is just to make you aware of rules and regs, basic operating procedure, and just touch on some aspects of the hobby. If anything, the licensing reflects the current state of the radio electronics for both the amateur and "professional" fields in which one does not have to know how to completely disassemble a radio and put it back together. I know. I have been working with various agencies in putting migrating their current analog systems onto digital transports to repeater sites and positioning those systems to work with IP based two-way radios and ancillary devices required for a modern Land Mobile Radio (LMR) system.

If anything, the real learning starts before and after the licensing process when one looks into the various skills and techniques that go into the hobby. Much of what i learned is by picking up a book discussing topics directly and somewhat or remotely related to radio; both amateur and commercial as I have my General Radio Operator's LIcense (GROL) with microwave endorsement. I, too, received my final licenses well into the appliance era.

I started by learning software (actually assembly language at the time) by writing machine code into a debugger. Then learned how to use a compiler for the Higher Order Languages. I learned my radio by putting together kits and hacking mods onto it. Some successful and others that let the Smoke Genie out of the bottle! I got my training in digital logic similarly. (My take on "dead bug" assembly technique is having an IC with it's innards exploding in a flash and puff of smoke.) I have also learned how to repair cars, do rough carpentry, electrical, and routers and analog and digital communications systems in the same manner. Masters of any of these? Definitely not. But i have an under standing of how things work so i can figure out what to do next if things don't seem right. I can perform the physical installation of microwave systems and routers and get circuits connecting but let the masters of each technology do their thing, then I make the whole thing work together.

If I had the time, I would love to deeply dive into a subject to come up with the mastery. But because I am still gainfully employed and need to remain somewhat of a generalist, that will not happen in the near future. That being said, I still enjoy dinking around proven circuits to see how changing things affect performance. Radio is particularly good with this methodology as the same radio will not perform universally well for everyone as there are a multitude of variables which affect performance that are not spec'd on a data sheet. Start with a formula (schematic); build it as specified; then proceed to get your hands dirty! Transmitters are probably the easiest as they can be put together with one or two transistors - the late Dave Ingram was probably the biggest evangelist here. Gratification is somewhat instantaneous as you can hear the output in a receiver. Receivers require a bit more but basic crystal/diode or regenerative receivers as extremely flexible and forgiving of playing "what if" with - so what if the coil you wound has a an extra or missing turn. (I just saw a short article on using an antenna tuner as a front end for a crystal receiver - something i have wanted to try but will probably do so now that i have seen it in print. It's really a terrible idea as receivers thrive on resonant front ends for best signal selection while transmitters typically require a reactive match to the antenna for maximum

power transfer which an antenna tuner tends to support; however, I have the parts for it and it's very simple to put together!).

Anyways, don't be disappointed in the current licensing process. It's just a product of the times. Instead, (I typically) find a good bookstore (the good ones are going away quickly) that has books on basic tube and transistor theory. I like books as they are easier to read and annotate. I have not been able to do so with as much success with web based research. Develop a good junk box with new and used parts that can be used to experiment with. Start with a basic VOM (I like analog meters best as I can read a meter sweep faster than waiting for an ADC to settle down on a value and report it to a digital display) and see what happens when biases and inputs are changed on tube or transistor circuits. Change the loads on the outputs to see what happens. Build a kit and change the circuit to see what happens. Above all, don't be afraid to break things because it will naturally happen when you experiment. The great inventors never got it right the first time. If you have read through the previous posts in the group, it is a miracle that we are all still alive and can tell about it. It's all part of the learning experience! (or I was an 800VDC dummy load).

73,
kevin
kc6pob

I am 56 years old. I got licensed in 1998 and upgraded
to General in
2000.

I had to pass 5 WPM to get on HF and I had to pass 13WPM
CW to
become a General

BUT

I never had to draw any circuits for any of my exams.

Looking back I wish it were a requirement to learn more
than being
an appliance operator.

26600. Re: Transceiver build with regen completed re: solid hookup wire for coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-07 11:24:56 UTC
From: dulmagedon@...
Topic: 26581 Message: 26600

Ok , I didn't realize that. So might I suggest learn to memorize your favourite Vacuum tube osc circuit. Mine happens to be the hartley but the colpits is similar only using centre tapped Cap pack rather then a coil. Regens are basically nothing more then underpowered oscillators with a set of phones and method of controlling rate of feedback. Otherwise the circuit is identical. It would take most of us about an hour to learn to draw from memory a osc circuit diagram. By noon everyone could have one in their head. Then the job becomes so much simpler.Otherwise one winds up following circuit diagrams and someone elses design forever not quite understanding what is going on and not knowing what is important and what isn't important. What isnt important in relationship to what is important is the key. and that comes with experience. Leonard just mentioned he guessed at the values for his Mk19 set. That doesn't mean they are hap hazard as some would be inclined to think. It mean he understands what he is doing and can and does get it up and running without a million questions and reams of somewhat pointless caculations. I would suggest the assignment to memory of a basic osc diagram , either vacuum tube if that is your flavour or solid state if you are inclined there would be the best thing you ever did for your hobby and it doesn't take that long. Next to that would be simple amplifier circuit. tube or SS . whatever your preference. The difference it makes in you building would be phenomenal. Instead of wondering in frustration as you build you would know. And like I said most of us can put a osc circuit to memory in a hour or so. certainly by noon today. Drawing it six times will usually do it with most of us. Keep a copy nearby if you wish but the difference it will make is huge.
For our test in the 1980s I had to draw a simple hartley osc , a simple colpits osc and draw a PA final with ampltude modulation applied. I remember I wasn't prepared for the last one and so took an guess. Turned out I drew a method Motorla had explored and the inspector in a previous life had been a Motorla engineer so I got lucky.
I will be honest here and tell you it took me a while to realize how significant knowing these circuits was. One day I put two and two together which I should have done many years ago. It was a lightbulb moment for me and i am somewhat ashamed it took so long to make the connection. Hopefully this will encourage at least a few to give it a try. It will change everytthing. You'll see. An hour of pain for a lifetime of gain.
Worst case scenario? What could it hurt?
donVe3LYX

26601. I'm 225 pound dummy load

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-07 12:54:25 UTC
From: Rob
Topic: 26599 Message: 26601

Yes Don.... I agree with your learn it... know it forever logic.
Thats why I came down the regenerative and tubes path.
The documentation is 100 years old and refined to the point where the
1920s magazines
explain to farmers how to build radios.
I like the idea that there is an attempt to make the builder understand
why the circuits work instead
of the way the solid state electronics cookbooks have 2,000 circuits
without any explanation of what
the circuits are doing.
Or worse.... expect the builder to have an electronics degree and KNOW
calculus.

And to Kevin
>
> The exam is not an end to learning.
>
I've been electrocuted.... when I was 12 years old.
Mains power... at a meter... was thrown 30 feet.

sort of kept me away from experimenting with tube power until finding
out that 45 volts on a TYPE 30 tube
meant five 9 volt batteries in series.

26602. Re: [regenrx] I'm 225 pound dummy load

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-07 13:18:25 UTC
From: Michael
Topic: 26599 Message: 26602

Rob, Kevin,

Real men East of the pond undergo their initiation
rites with a 220-240 VAC jolt.

The wacky/stupid ones with a 500 VAC transformer
in the RTX power supply unit smile down on us...

Michael

PS : Can't remember the calculus and Fourier transforms
I didn't even understand at parrot-learning exam-revision time.

On 07.06.16 13:54, Rob roomberg@... [regenrx] wrote:
>
>
> Yes Don.... I agree with your learn it... know it forever logic.
> Thats why I came down the regenerative and tubes path.
> The documentation is 100 years old and refined to the point where the
> 1920s magazines
> explain to farmers how to build radios.
> I like the idea that there is an attempt to make the builder understand
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> of the way the solid state electronics cookbooks have 2,000 circuits
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> And to Kevin
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> Mains power... at a meter... was thrown 30 feet.
>
> sort of kept me away from experimenting with tube power until finding
> out that 45 volts on a TYPE 30 tube
> meant five 9 volt batteries in series.

26603. RE: [Boatanchors] FS: Antique Micromatch SWR-Power Meter, 1947

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-09 02:59:13 UTC
From: Bry Carling
Topic: 26591 Message: 26603

This meter has been sold. Thank you to all who inquired.
Bry AF4K

> From: af4k@...
> To: armyradios@yahoogroups.com; flboatanchors@yahoogroups.com; tetrode@...; boatanchors@...; regenrx@yahoogroups.com
> Date: Mon, 6 Jun 2016 17:02:18 -0400
> Subject: [Boatanchors] FS: Antique Micromatch SWR-Power Meter, 1947
>
> FOR SALE:
>
> This is a true collectors item if ever there was!
> 1947 Micromatch SWR / Power Meter as described in QST Magazine for April 1947 Pages 15-20.
>
> Measures SWR, Power Ratio (!) and also Power - forward and reflected in Watts.
>
> Can be used for several different transmission line impedances from 50 to 300 ohms!
>
> There are two SO239 connectors for input / output and associated banana jack / binding posts.
>
> It's hard to tell whether this unit is commercially produced (sure looks like it) or something home brew.
> It may even be the exact unit that was built for the article. In any event it comes with documentation.
>
> Pictures and details at:
> http://af4k.com/miscpart.htm
>
> Available for $60.00 plus shipping.
>
>
>
> --
> Boatanchors mailing list
> Home: http://mailman.qth.net/mailman/listinfo/boatanchors
> Help: http://mailman.qth.net/mmfaq.htm
> Post: mailto:Boatanchors@mailman.qth.net
>
> List Administrator: Duane Fischer, W8DBF
> ** For Assistance: dfischer at usol.com **
>
>
> This list hosted by: http://www.qsl.net

> Please help support this email list: http://www.qsl.net/donate.html
> Message delivered to af4k@...

26604. VK3YE's Ceramic Resonator Regen WORKS!

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-10 06:33:12 UTC
From: Rob
Topic: 25840 Message: 26604

I built the 40 meter ceramic resonator regenerative receiver
pictures and audio recording here:
http://www.learnmorsecode.com/716/716.html

I'm pretty much stunned that it worked.

26605. Re: [regenrx] VK3YE's Ceramic Resonator Regen WORKS!

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-10 07:55:34 UTC
From: Michael
Topic: 25840 Message: 26605

Interesting, Rob!

My first attempt didn't work either, so I put it aside until
I have time to tinker. Unwisely, I soldered everything :-)

Has anyone else tried and/or modded this VK3YE design?
On the mp3, what is the origin of the very loud buzz?
It sounds like a router or switch-mode device.

Michael

On 10.06.16 07:33, Rob roomberg@... [regenrx] wrote:

> I built the 40 meter ceramic resonator regenerative receiver
> pictures and audio recording here:
> http://www.learnmorsecode.com/716/716.html
>
> I'm pretty much stunned that it worked.

26606. Re: VK3YE's Ceramic Resonator Regen "Clone"

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-10 12:06:29 UTC
From: b_weeber@...
Topic: 25840 Message: 26606

Hi Rob

I belive, you catch that buzz, because your antenna doesn't have a dc path to ground. My reception is completely clear without any hum. If your antenna impedance is 50 Ohms, then try a 50 ... 100 Ohms resistor from your antenna connection to ground.

Regarding the reception quality i can't recognize a big difference between the ceramic resonator and an LC circuit.

Best regards,
Bernd

26607. 2.5v Tubes for Sale

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-10 19:08:32 UTC
From: J Ed
Topic: 26607 Message: 26607

Hi all,

I'm trying to find a new home for these tubes. They were somewhat expensive to me but I am willing to send them off for a reasonable price to someone interested. Please message me off list if you want them. I'm looking for cash only, no trades.

X1 80 rectifier
X1 24A sharp cutoff tetrode
X2 47 power pentodes
X4 27 triode
X4 35/51 remote cutoff tetrode

Ed AE7TE

26608. VK3YE's Ceramic Resonator Regen BUZZ

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-11 05:26:45 UTC
From: Rob
Topic: 25840 Message: 26608

I tried 50 and 100 ohms but got no reduction of the buzz.

On 06/10/2016 08:06 AM, b_weeber@... [regenrx] wrote:
>
> Hi Rob
>
> I belive, you catch that buzz, because your antenna doesn't have a dc
> path to ground. My reception is completely clear without any hum. If
> your antenna impedance is 50 Ohms, then try a 50 ... 100 Ohms resistor
> from your antenna connection to ground.
>
> Regarding the reception quality i can't recognize a big difference
> between the ceramic resonator and an LC circuit.
>
> Best regards,
> Bernd
>
>

26609. Re: [regenrx] VK3YE's Ceramic Resonator Regen BUZZ

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-11 08:34:16 UTC
From: Michael
Topic: 25840 Message: 26609

If not from a naughtylocal digital source and not relieved
by antenna-pleasing, it might be a hum loop in the
board layout. Is it the same with mains or battery
power supply? I would try anew with a copper-clad
pcb, single earth point, short wiring etc.

Depending on the strength and proximity of nearby signals,
the resonator should offer better front-end selectivity
than a LC circuit, but not as narrow as a quarz.
Many moons ago I tried a quarz plus 40673 mosfet front-end
in a simple receiver for monitoring a SSB fixed-channel network.
It was a bit narrow for SSB, but certainly effective in
suppressing adjacent and tropical static interference.

But I had best keep quiet until I have found time
to retry my own failed attempt at reproducing the VK3YE :-)

Michael

On 11.06.16 06:26, Rob roomberg@... [regenrx] wrote:
>
> I tried 50 and 100 ohms but got no reduction of the buzz.
>
>
> On 06/10/2016 08:06 AM, b_weeber@... [regenrx] wrote:

>> I belive, you catch that buzz, because your antenna doesn't have a dc
>> path to ground. My reception is completely clear without any hum. If
>> your antenna impedance is 50 Ohms, then try a 50 ... 100 Ohms resistor
>> from your antenna connection to ground.
>>
>> Regarding the reception quality i can't recognize a big difference
>> between the ceramic resonator and an LC circuit.
>>
>> Best regards,
>> Bernd

26610. Re: [regenrx] VK3YE's Ceramic Resonator Regen BUZZ

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-11 15:37:50 UTC
From: Rob
Topic: 25840 Message: 26610

I have experienced that same loud buzz humming in my simple crystal
radios also
so I'm not real surprised by it at all.
I was sort of hoping for better selectivity with this layout.

I definitely will be buttoning down the circuit on soldered PCB.
The wire wrap version was strictly an attempt to learn how to wire wrap
a fast prototype
AND
I considered it a success because noise hum or not..... it heard HF CW
that I could copy.
Given just that much success defined the next chase to RF front end
filters and audio passband filters.

IF the wire wrapped components.... all soldered to PCB ...yields the
same results
then
I will build more wire wrap circuits.
If soldered components go quiet then the wire wrap will be used for
non-RF circuits.

As far as your circuit not working goes.....
I found that the amount of regenerative resistance needed tweaking.
I had nothing ...total silence ... until I shorted out the 220K resistor
between the regen pot and the positive
volts rail cutting out that 220K.

So KEEP the ideas coming.
Nothing is ever a bad idea until somebody bleeds or gets pregnant.

On 06/11/2016 04:34 AM, Michael michael.setaazul@...
[regenrx] wrote:
>
> If not from a naughtylocal digital source and not relieved
> by antenna-pleasing, it might be a hum loop in the
> board layout. Is it the same with mains or battery
> power supply? I would try anew with a copper-clad
> pcb, single earth point, short wiring etc.
>
> Depending on the strength and proximity of nearby signals,
> the resonator should offer better front-end selectivity
> than a LC circuit, but not as narrow as a quarz.
> Many moons ago I tried a quarz plus 40673 mosfet front-end
> in a simple receiver for monitoring a SSB fixed-channel network.
> It was a bit narrow for SSB, but certainly effective in
> suppressing adjacent and tropical static interference.

>
> But I had best keep quiet until I have found time
> to retry my own failed attempt at reproducing the VK3YE :-)
>
> Michael
>
> On 11.06.16 06:26, Rob roomberg@... [regenrx] wrote:
> >
> > I tried 50 and 100 ohms but got no reduction of the buzz.
> >
> >
> > On 06/10/2016 08:06 AM, b_weeber@... [regenrx] wrote:
>
> >> I belive, you catch that buzz, because your antenna doesn't have a dc
> >> path to ground. My reception is completely clear without any hum. If
> >> your antenna impedance is 50 Ohms, then try a 50 ... 100 Ohms resistor
> >> from your antenna connection to ground.
> >>
> >> Regarding the reception quality i can't recognize a big difference
> >> between the ceramic resonator and an LC circuit.
> >>
> >> Best regards,
> >> Bernd
>
>

26611. Re: [regenrx] VK3YE's Ceramic Resonator Regen BUZZ

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-11 17:27:02 UTC
From: Leonard Meek
Topic: 25840 Message: 26611

Rob, do you get the buzz on other radios? Is it steady or intermittent? If you get it on transistor radios, then it must be something in the environment, like TV, or computers, or overhead power lines. My wife's radio goes berserk when ever I turn on my computer. We also get radar interference from the ships in Pearl Harbor sometimes. Right now I'm getting what sounds like steady ignition noise, but I think it's from my neighbors motion sensor lights. Some solar equipment will also cause interference. We live in a noisy, noisy world.

Leonard

----- Original Message -----
From: "Michael michael.setaazul@... [regenrx]"
<regenrx@yahoogroups.com>
To: <regenrx@yahoogroups.com>
Sent: Friday, June 10, 2016 10:34 PM
Subject: Re: [regenrx] VK3YE's Ceramic Resonator Regen BUZZ

> If not from a naughtylocal digital source and not relieved
> by antenna-pleasing, it might be a hum loop in the
> board layout. Is it the same with mains or battery
> power supply? I would try anew with a copper-clad
> pcb, single earth point, short wiring etc.
>
> Depending on the strength and proximity of nearby signals,
> the resonator should offer better front-end selectivity
> than a LC circuit, but not as narrow as a quarz.
> Many moons ago I tried a quarz plus 40673 mosfet front-end
> in a simple receiver for monitoring a SSB fixed-channel network.
> It was a bit narrow for SSB, but certainly effective in
> suppressing adjacent and tropical static interference.
>
> But I had best keep quiet until I have found time
> to retry my own failed attempt at reproducing the VK3YE :-)
>
> Michael
>
>
>
> On 11.06.16 06:26, Rob roomberg@... [regenrx] wrote:
>>
>> I tried 50 and 100 ohms but got no reduction of the buzz.
>>
>>
>> On 06/10/2016 08:06 AM, b_weeber@... [regenrx] wrote:
>

>>> I belive, you catch that buzz, because your antenna doesn't have a dc
>>> path to ground. My reception is completely clear without any hum. If
>>> your antenna impedance is 50 Ohms, then try a 50 ... 100 Ohms resistor
>>> from your antenna connection to ground.
>>>
>>> Regarding the reception quality i can't recognize a big difference
>>> between the ceramic resonator and an LC circuit.
>>>
>>> Best regards,
>>> Bernd
>
>
> ------------------------------------
> Posted by: Michael <michael.setaazul@...>
> ------------------------------------
>
> "In the interest of Regenerating radio's lost art of Regeneration"
> ------------------------------------
>
> Yahoo Groups Links
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>

26612. Re: [regenrx] VK3YE's Ceramic Resonator Regen BUZZ

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-11 19:55:42 UTC
From: Rob
Topic: 25840 Message: 26612

I tend to believe its normal AC hum from household wiring because I only hear it on
a basic raw home brewed crystal radio and now this 716 receiver.

I do not have static on TVs or hear it on an MFJ9040 or other store bought ham radios.

Which leads me to believe its a construction and design issue of my experimental radios
that I left out of this basic experiment.

On 06/11/2016 01:27 PM, 'Leonard Meek' lemeek@... [regenrx] wrote:
>
> Rob, do you get the buzz on other radios? Is it steady or
> intermittent? If
> you get it on transistor radios, then it must be something in the
> environment, like TV, or computers, or overhead power lines. My wife's
> radio
> goes berserk when ever I turn on my computer. We also get radar
> interference from the ships in Pearl Harbor sometimes. Right now I'm
> getting
> what sounds like steady ignition noise, but I think it's from my
> neighbors
> motion sensor lights. Some solar equipment will also cause
> interference. We
> live in a noisy, noisy world.
>
> Leonard
>
> ----- Original Message -----
> From: "Michael michael.setaazul@... [regenrx]"
> <regenrx@yahoogroups.com>
> To: <regenrx@yahoogroups.com>
> Sent: Friday, June 10, 2016 10:34 PM
> Subject: Re: [regenrx] VK3YE's Ceramic Resonator Regen BUZZ
>
> > If not from a naughtylocal digital source and not relieved
> > by antenna-pleasing, it might be a hum loop in the
> > board layout. Is it the same with mains or battery
> > power supply? I would try anew with a copper-clad
> > pcb, single earth point, short wiring etc.
> >
> > Depending on the strength and proximity of nearby signals,
> > the resonator should offer better front-end selectivity
> > than a LC circuit, but not as narrow as a quarz.

> > Many moons ago I tried a quarz plus 40673 mosfet front-end
> > in a simple receiver for monitoring a SSB fixed-channel network.
> > It was a bit narrow for SSB, but certainly effective in
> > suppressing adjacent and tropical static interference.
> >
> > But I had best keep quiet until I have found time
> > to retry my own failed attempt at reproducing the VK3YE :-)
> >
> > Michael
> >
> >
> >
> > On 11.06.16 06:26, Rob roomberg@... [regenrx] wrote:
> >>
> >> I tried 50 and 100 ohms but got no reduction of the buzz.
> >>
> >>
> >> On 06/10/2016 08:06 AM, b_weeber@... [regenrx] wrote:
> >
> >>> I belive, you catch that buzz, because your antenna doesn't have a dc
> >>> path to ground. My reception is completely clear without any hum. If
> >>> your antenna impedance is 50 Ohms, then try a 50 ... 100 Ohms resistor
> >>> from your antenna connection to ground.
> >>>
> >>> Regarding the reception quality i can't recognize a big difference
> >>> between the ceramic resonator and an LC circuit.
> >>>
> >>> Best regards,
> >>> Bernd
> >
> >
> > ------------------------------------
> > Posted by: Michael <michael.setaazul@...>
> > ------------------------------------
> >
> > "In the interest of Regenerating radio's lost art of Regeneration"
> > ------------------------------------
> >
> > Yahoo Groups Links
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>

26613. Re: [regenrx] VK3YE's Ceramic Resonator Regen BUZZ

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-11 21:03:30 UTC
From: Leonard Meek
Topic: 25840 Message: 26613

Rob, another posibility is your ground. A friend of mine was getting some interference (I think it was 60Hz hum) on his radio. He was connedted to a water pipe for his ground. It turned out that the pipe he was connected to was galvanized iron, but the house wiring was connected to the incoming copper water pipe. The pipes were connected, but there was several volts between them because of dissimilar metal action. Runnung a ground wire back to the electric panel ground solved the problem. Of course he could have used the AC outlet ground since it's grounded at the electric panel. I had a similar problem with my R-649A AC/DC radio. I solved it by putting it on an isolation transformer.

Leonard

----- Original Message -----
From: Rob roomberg@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Saturday, June 11, 2016 9:55 AM
Subject: Re: [regenrx] VK3YE's Ceramic Resonator Regen BUZZ

I tend to believe its normal AC hum from household wiring because I only hear it on a basic raw home brewed crystal radio and now this 716 receiver.

I do not have static on TVs or hear it on an MFJ9040 or other store bought ham radios.

Which leads me to believe its a construction and design issue of my experimental radios that I left out of this basic experiment.

On 06/11/2016 01:27 PM, 'Leonard Meek' lemeek@hawaiiantel.net [regenrx] wrote:

Rob, do you get the buzz on other radios? Is it steady or intermittent? If you get it on transistor radios, then it must be something in the environment, like TV, or computers, or overhead power lines. My wife's radio goes berserk when ever I turn on my computer. We also get radar interference from the ships in Pearl Harbor sometimes. Right now I'm getting what sounds like steady ignition noise, but I think it's from my neighbors motion sensor lights. Some solar equipment will also cause interference. We live in a noisy, noisy world.

Leonard

----- Original Message -----
From: "Michael michael.setaazul@... [regenrx]"
<regenrx@yahoogroups.com>
To: <regenrx@yahoogroups.com>
Sent: Friday, June 10, 2016 10:34 PM
Subject: Re: [regenrx] VK3YE's Ceramic Resonator Regen BUZZ

> If not from a naughtylocal digital source and not relieved
> by antenna-pleasing, it might be a hum loop in the

> board layout. Is it the same with mains or battery
> power supply? I would try anew with a copper-clad
> pcb, single earth point, short wiring etc.
>
> Depending on the strength and proximity of nearby signals,
> the resonator should offer better front-end selectivity
> than a LC circuit, but not as narrow as a quarz.
> Many moons ago I tried a quarz plus 40673 mosfet front-end
> in a simple receiver for monitoring a SSB fixed-channel network.
> It was a bit narrow for SSB, but certainly effective in
> suppressing adjacent and tropical static interference.
>
> But I had best keep quiet until I have found time
> to retry my own failed attempt at reproducing the VK3YE :-)
>
> Michael
>
>
>
> On 11.06.16 06:26, Rob roomberg@... [regenrx] wrote:
>>
>> I tried 50 and 100 ohms but got no reduction of the buzz.
>>
>>
>> On 06/10/2016 08:06 AM, b_weeber@... [regenrx] wrote:
>
>>> I belive, you catch that buzz, because your antenna doesn't have a dc
>>> path to ground. My reception is completely clear without any hum. If
>>> your antenna impedance is 50 Ohms, then try a 50 ... 100 Ohms resistor
>>> from your antenna connection to ground.
>>>
>>> Regarding the reception quality i can't recognize a big difference
>>> between the ceramic resonator and an LC circuit.
>>>
>>> Best regards,
>>> Bernd
>
>
> ------------------------------------
> Posted by: Michael <michael.setaazul@...>
> ------------------------------------
>
> "In the interest of Regenerating radio's lost art of Regeneration"
> ------------------------------------
>
> Yahoo Groups Links
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>
>
>

26614. Re: [regenrx] VK3YE's Ceramic Resonator Regen BUZZ

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-11 21:59:47 UTC
From: Michael
Topic: 25840 Message: 26614

Good point, Leonard.

Dissimilar metals can form a primitive diode, allowing
"dirty" modulation to feed into a receiver. This can happen,
for example, at TV antenna connections between aluminium elements
and brass connectors and copper coax.

We look forward to a happy outcome of your sleuthing, Rob!

Michael

On 11.06.16 22:03, Leonard Meek wrote:
>
> *Rob, another posibility is your ground. A friend of mine was getting
> some interference (I think it was 60Hz hum) on his radio. He was
> connedted to a water pipe for his ground. It turned out that the pipe
> he was connected to was galvanized iron, but the house wiring was
> connected to the incoming copper water pipe. The pipes were connected,
> but there was several volts between them because of dissimilar metal
> action. Runnung a ground wire back to the electric panel ground solved
> the problem. Of course he could have used the AC outlet ground since
> it's grounded at the electric panel. I had a similar problem with my
> R-649A AC/DC radio. I solved it by putting it on an isolation transformer.*
> **
> *Leonard*

26615. Re: [regenrx] VK3YE's Ceramic Resonator Regen BUZZ

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-11 22:19:00 UTC
From: Rob
Topic: 25840 Message: 26615

ahhhhh.... I wish I had something more complicated that debugging would
cure this hum BUT
my ground wire exits the radio room through a hole in the wall and goes
directly to a spike in the ground.
I could revisit the spike and connection... scrape something shiny again.

Thanks for the ideas.

On 06/11/2016 05:59 PM, Michael michael.setaazul@...
[regenrx] wrote:
>
> Good point, Leonard.
>
> Dissimilar metals can form a primitive diode, allowing
> "dirty" modulation to feed into a receiver. This can happen,
> for example, at TV antenna connections between aluminium elements
> and brass connectors and copper coax.
>
> We look forward to a happy outcome of your sleuthing, Rob!
>
> Michael
>
> On 11.06.16 22:03, Leonard Meek wrote:
> >
> > *Rob, another posibility is your ground. A friend of mine was getting
> > some interference (I think it was 60Hz hum) on his radio. He was
> > connedted to a water pipe for his ground. It turned out that the pipe
> > he was connected to was galvanized iron, but the house wiring was
> > connected to the incoming copper water pipe. The pipes were connected,
> > but there was several volts between them because of dissimilar metal
> > action. Runnung a ground wire back to the electric panel ground solved
> > the problem. Of course he could have used the AC outlet ground since
> > it's grounded at the electric panel. I had a similar problem with my
> > R-649A AC/DC radio. I solved it by putting it on an isolation
> transformer.*
> > **
> > *Leonard*
>
>

26616. Re: VK3YE's Ceramic Resonator Regen WORKS!

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-11 23:23:18 UTC
From: dulmagedon@...
Topic: 25840 Message: 26616

Congratulations. I had to smile at your comment. "I am stunned it worked." The new transceiver I just did was also I am surprised it worked deal. The regen is so simple most wouldn't build it but even before I hooked up the audio stage I could tell it was a keeper. When I hooked up the audio I had some hum issues which by the way were not there before. Since it is Ac powered I worked away at it. Reducing the plate voltage to the audio tube helped a lot bring it from terrible to useable so I went at the PSU, a 12volt/120 output deal feeding a doubler. (need that for the transmitter section) . I recently bought a bag of 40 100 uf /450n volt electrolytics from China and so took a old audio transformer using the primary as a choke and added it after the doublers output . Now I have no hum at all. Never had such good luck before. I have spent several hours enjoying the regen section of the transceiver. It works very well. Been calling Cq with the Tx but so far no cigar (7040khz) however I have also tried with my 45 watt Cw rig with the same result so I am ok for now. I know this rig is putting out a decent signal compared to others I use regularly. I guess your ceramic resonator would lend itself easily to a Transceiver deal. n
Anyway,nice to see you stepping out there and giving it a go. Impressive! Hope you enjoy it for a long time.
donVe3LYX

26617. Re: [regenrx] VK3YE's Ceramic Resonator Regen BUZZ

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-12 01:43:12 UTC
From: Leonard Meek
Topic: 25840 Message: 26617

Rob, I have a 10 foot copper pipe down in the earth for my ground. I measure 4 vac between it and the electric system ground.. I have a switch on my antenna panel that can select line ground, earth ground, or floating ground.. It comes in handy sometimes.

Leonard

----- Original Message -----
From: Rob roomberg@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Saturday, June 11, 2016 12:19 PM
Subject: Re: [regenrx] VK3YE's Ceramic Resonator Regen BUZZ

ahhhhh.... I wish I had something more complicated that debugging would cure this hum BUT my ground wire exits the radio room through a hole in the wall and goes directly to a spike in the ground.
I could revisit the spike and connection... scrape something shiny again.

Thanks for the ideas.

On 06/11/2016 05:59 PM, Michael michael.setaazul@... [regenrx] wrote:

Good point, Leonard.

Dissimilar metals can form a primitive diode, allowing
"dirty" modulation to feed into a receiver. This can happen,
for example, at TV antenna connections between aluminium elements
and brass connectors and copper coax.

We look forward to a happy outcome of your sleuthing, Rob!

Michael

26618. VK3YE's Ceramic Resonator Regen NO BUZZ all fixed

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-12 05:47:51 UTC
From: Rob
Topic: 25840 Message: 26618

All fixed
new pictures and audio recording here:
http://www.learnmorsecode.com/716/716.html

I needed to experiment with the regeneration potentiometer values since
I didn't have a 50K pot.
First try at splitting the 50K in two using two 20K pots and soldering
the tuning cap to the board
AND THE BUZZ WAS GONE!!!!!!!!!!!!!!!!!

Just WOW.
Real big WOW.

This has been 18 months of research and examining how to build a short
wave receiver
REAL CHEAP
for the kids gigs and scouts
that WOULD receive Morse code.

18 months of examining how radio circuits work
and even how the parts were made... thanks to 1920s magazine PDFs.

But this is the first working radio I built during all that research time.
And I am just stunned at how pleasant the audio is.

Next task is an audio amplifier.
I have all sorts of options there ready to knit together.

Considering all my components came from China EBAY sales....
I think the cost so far to repeat this circuit is $7.

On 06/11/2016 09:43 PM, 'Leonard Meek' lemeek@... [regenrx]
wrote:
>
> □
>
> *Rob, I have a 10 foot copper pipe down in the earth for my ground. I
> measure 4 vac between it and the electric system ground.. I have a
> switch on my antenna panel that can select line ground, earth ground,
> or floating ground.. It comes in handy sometimes.*
> **
> *Leonard*
> **
>
> ----- Original Message -----
> *From:* Rob roomberg@... [regenrx]

> <mailto:roomberg@...%20[regenrx]>
> *To:* regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>
> *Sent:* Saturday, June 11, 2016 12:19 PM
> *Subject:* Re: [regenrx] VK3YE's Ceramic Resonator Regen BUZZ
>
> ahhhhh.... I wish I had something more complicated that debugging
> would cure this hum BUT
> my ground wire exits the radio room through a hole in the wall and
> goes directly to a spike in the ground.
> I could revisit the spike and connection... scrape something shiny
> again.
>
> Thanks for the ideas.
>
>
> On 06/11/2016 05:59 PM, Michael michael.setaazul@...
> [regenrx] wrote:
>>
>> Good point, Leonard.
>>
>> Dissimilar metals can form a primitive diode, allowing
>> "dirty" modulation to feed into a receiver. This can happen,
>> for example, at TV antenna connections between aluminium elements
>> and brass connectors and copper coax.
>>
>> We look forward to a happy outcome of your sleuthing, Rob!
>>
>> Michael
>>
>

26619. Re: [regenrx] VK3YE's Ceramic Resonator Regen NO BUZZ all fixed

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-12 08:14:39 UTC
From: Michael
Topic: 25840 Message: 26619

Congratlations, Rob!

We learn more each day, from our own and from each other's
endeavours. Fiddling with radios must be one of the best
senility delay therapies!

It will be interesting to hear how you tame the audio
and keep that hum at bay.

Michael

On 12.06.16 06:47, Rob roomberg@... [regenrx] wrote:
>
>
> All fixed
> new pictures and audio recording here:
> http://www.learnmorsecode.com/716/716.html
>
> I needed to experiment with the regeneration potentiometer values since
> I didn't have a 50K pot.
> First try at splitting the 50K in two using two 20K pots and soldering
> the tuning cap to the board
> AND THE BUZZ WAS GONE!!!!!!!!!!!!!!!!!
....
> Next task is an audio amplifier.

26620. Re: [regenrx] VK3YE's Ceramic Resonator Regen NO BUZZ all fixed

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-12 08:50:52 UTC
From: Rob
Topic: 25840 Message: 26620

Senility Delay Therapy

hmmm.... an SDT....
My wife is going to be pissed when I tell her I got an SDT.

I've got ICs like LM386 and TDA7052 and discrete components like TIP31
and TIP32 and TL431
so I'm pretty sure I'm going to make some noise:

My experimental "goto" amplifier is a 9 volt guitar amplifier.
I found out that it uses a TDA7052 chip so I got some of them to play
music or radio:

http://www.learnmorsecode.com/amp/index.html

On 06/12/2016 04:14 AM, Michael michael.setaazul@...
[regenrx] wrote:
>
> Congratlations, Rob!
>
> We learn more each day, from our own and from each other's
> endeavours. Fiddling with radios must be one of the best
> senility delay therapies!
>
> It will be interesting to hear how you tame the audio
> and keep that hum at bay.
>
> Michael
>
> On 12.06.16 06:47, Rob roomberg@... [regenrx] wrote:
> >
> >
> > All fixed
> > new pictures and audio recording here:
> > http://www.learnmorsecode.com/716/716.html
> >
> > I needed to experiment with the regeneration potentiometer values since
> > I didn't have a 50K pot.
> > First try at splitting the 50K in two using two 20K pots and soldering
> > the tuning cap to the board
> > AND THE BUZZ WAS GONE!!!!!!!!!!!!!!!!!
> ....
> > Next task is an audio amplifier.
>
>

26621. Re: [regenrx] VK3YE's Ceramic Resonator Regen NO BUZZ all fixed

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-12 17:13:45 UTC
From: Leonard Meek
Topic: 25840 Message: 26621

----- Original Message -----
From: Rob roomberg@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Saturday, June 11, 2016 10:50 PM
Subject: Re: [regenrx] VK3YE's Ceramic Resonator Regen NO BUZZ all fixed

Senility Delay Therapy

hmmm.... an SDT....
My wife is going to be pissed when I tell her I got an SDT.

I've got ICs like LM386 and TDA7052 and discrete components like TIP31 and TIP32 and TL431 so I'm pretty sure I'm going to make some noise:

My experimental "goto" amplifier is a 9 volt guitar amplifier.
I found out that it uses a TDA7052 chip so I got some of them to play music or radio:

http://www.learnmorsecode.com/amp/index.html

On 06/12/2016 04:14 AM, Michael michael.setaazul@btopenworld.com [regenrx] wrote:

Congratlations, Rob!

We learn more each day, from our own and from each other's
endeavours. Fiddling with radios must be one of the best
senility delay therapies!

It will be interesting to hear how you tame the audio
and keep that hum at bay.

Michael

On 12.06.16 06:47, Rob roomberg@... [regenrx] wrote:
>
>
> All fixed
> new pictures and audio recording here:
> http://www.learnmorsecode.com/716/716.html
>
> I needed to experiment with the regeneration potentiometer values since
> I didn't have a 50K pot.
> First try at splitting the 50K in two using two 20K pots and soldering
> the tuning cap to the board
> AND THE BUZZ WAS GONE!!!!!!!!!!!!!!!!!
....
> Next task is an audio amplifier.

26622. Re: [regenrx] VK3YE's Ceramic Resonator Regen NO BUZZ all fixed

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-12 17:19:51 UTC
From: Leonard Meek
Topic: 25840 Message: 26622

Rob, if you use an IC like the LM386, be sure to use an emitter (source, cathode) follower between it and the tube circuit to match the impedance as Dave Newkirk suggested. Take a look at my Mk.21 in the Files section. The component values I used may not be optimum but it works surprisingly well.

Leonard

----- Original Message -----
From: Rob roomberg@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Saturday, June 11, 2016 10:50 PM
Subject: Re: [regenrx] VK3YE's Ceramic Resonator Regen NO BUZZ all fixed

Senility Delay Therapy

hmmm.... an SDT....
My wife is going to be pissed when I tell her I got an SDT.

I've got ICs like LM386 and TDA7052 and discrete components like TIP31 and TIP32 and TL431 so I'm pretty sure I'm going to make some noise:

My experimental "goto" amplifier is a 9 volt guitar amplifier.
I found out that it uses a TDA7052 chip so I got some of them to play music or radio:

http://www.learnmorsecode.com/amp/index.html

On 06/12/2016 04:14 AM, Michael michael.setaazul@btopenworld.com [regenrx] wrote:

Congratlations, Rob!

We learn more each day, from our own and from each other's
endeavours. Fiddling with radios must be one of the best
senility delay therapies!

It will be interesting to hear how you tame the audio
and keep that hum at bay.

Michael

On 12.06.16 06:47, Rob roomberg@... [regenrx] wrote:
>
>
> All fixed
> new pictures and audio recording here:
> http://www.learnmorsecode.com/716/716.html
>
> I needed to experiment with the regeneration potentiometer values since
> I didn't have a 50K pot.

> First try at splitting the 50K in two using two 20K pots and soldering
> the tuning cap to the board
> AND THE BUZZ WAS GONE!!!!!!!!!!!!!!!!!
....
> Next task is an audio amplifier.

26623. Re: [regenrx] VK3YE's Ceramic Resonator Regen NO BUZZ all fixed

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-13 02:53:57 UTC
From: Rob
Topic: 25840 Message: 26623

Huh?
I am very familiar with your Mk21 circuit. I followed your mod 3C and 3D discussions
and stowed the images here so Arnie could see them too:
http://www.learnmorsecode.com/regenx/LM/index.html

and then
I bought some EBAY 6AK5 tubes and bases.
I did not build anything yet. I'm saving my tube rig builds for later.
I am gathering parts and learning why they work first.

BUT

my VK3YE ceramic resonator regen
IS NOT A TUBE radio

so how does what you are suggesting
"to use an emitter (source, cathode) follower between it and the tube circuit "
apply to this ceramic resonator circuit?

http://www.learnmorsecode.com/716/VK3YEmodKB3BYT.jpg

http://www.learnmorsecode.com/716/716.html

I took this radio out for a road trip tonight to dinner at my in-laws mountain top
house.... at 1600 feet.... sort of top of the world here.

I wanted to see what would happen if I used simple wire for an antenna instead of
my ham radio RYBOKOV antenna.

I tossed a spool of 22 AWG magnet wire over a 20 foot high tree limb
and used a screw driver as a ground rod.

I heard all sorts of CW and also found some Spanish broadcast radio.
I have to wonder if Arnie was on the air tonight.

I am really liking this radio.

On 06/12/2016 01:19 PM, 'Leonard Meek' lemeek@hawaiiantel.net [regenrx] wrote:
>
> □
>
> *Rob, if you use an IC like the LM386, be sure to use an emitter
> (source, cathode) follower between it and the tube circuit to match

> the impedance as Dave Newkirk suggested. Take a look at my Mk.21 in
> the Files section. The component values I used may not be optimum but
> it works surprisingly well.*
> **
> *Leonard*
> **
>
> ----- Original Message -----
> *From:* Rob roomberg@... [regenrx]
> <mailto:roomberg@...%20[regenrx]>
> *To:* regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>
> *Sent:* Saturday, June 11, 2016 10:50 PM
> *Subject:* Re: [regenrx] VK3YE's Ceramic Resonator Regen NO BUZZ
> all fixed
>
> Senility Delay Therapy
>
> hmmm.... an SDT....
> My wife is going to be pissed when I tell her I got an SDT.
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> I've got ICs like LM386 and TDA7052 and discrete components like
> TIP31 and TIP32 and TL431
> so I'm pretty sure I'm going to make some noise:
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> My experimental "goto" amplifier is a 9 volt guitar amplifier.
> I found out that it uses a TDA7052 chip so I got some of them to
> play music or radio:
>
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>
>
>
>
>
>
> On 06/12/2016 04:14 AM, Michael michael.setaazul@...
> [regenrx] wrote:
>>
>> Congratlations, Rob!
>>
>> We learn more each day, from our own and from each other's
>> endeavours. Fiddling with radios must be one of the best
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>>
>> It will be interesting to hear how you tame the audio
>> and keep that hum at bay.
>>
>> Michael
>>

>> On 12.06.16 06:47, Rob roomberg@... [regenrx] wrote:
>> >
>> >
>> > All fixed
>> > new pictures and audio recording here:
>> > http://www.learnmorsecode.com/716/716.html
>> >
>> > I needed to experiment with the regeneration potentiometer
>> values since
>> > I didn't have a 50K pot.
>> > First try at splitting the 50K in two using two 20K pots and
>> soldering
>> > the tuning cap to the board
>> > AND THE BUZZ WAS GONE!!!!!!!!!!!!!!!!!!
>> ....
>> > Next task is an audio amplifier.
>>
>
>

26624. Re: [regenrx] VK3YE's Ceramic Resonator Regen NO BUZZ all fixed

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-13 04:43:19 UTC
From: Leonard Meek
Topic: 25840 Message: 26624

Rob, the Mod 3d was the final version. Note that the output of the 6AK5 does not feed directly into the LM386. Because the impedance at the output of the 6AK5 is a lot higher than the input of the LM386, it tends to load the detector, reducing sensitivity. Putting a source follower (in this case) between them adapts the high impedance circuit to the low impedance circuit. It could have been an emitter follower or a cathode follower, all of which have high input and low output impedances.The improvement in the 3d over the 3c was clearly noticeable, thanks to Dave Newkirk.
----- Original Message -----
From: Rob roomberg@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Sunday, June 12, 2016 4:53 PM
Subject: Re: [regenrx] VK3YE's Ceramic Resonator Regen NO BUZZ all fixed

Huh?
I am very familiar with your Mk21 circuit. I followed your mod 3C and 3D discussions
and stowed the images here so Arnie could see them too:
http://www.learnmorsecode.com/regenx/LM/index.html

and then
I bought some EBAY 6AK5 tubes and bases.
I did not build anything yet. I'm saving my tube rig builds for later.
I am gathering parts and learning why they work first.

BUT

my VK3YE ceramic resonator regen
IS NOT A TUBE radio

so how does what you are suggesting
"to use an emitter (source, cathode) follower between it and the tube circuit "
apply to this ceramic resonator circuit?

http://www.learnmorsecode.com/716/VK3YEmodKB3BYT.jpg

http://www.learnmorsecode.com/716/716.html

I took this radio out for a road trip tonight to dinner at my in-laws mountain top
house.... at 1600 feet.... sort of top of the world here.

I wanted to see what would happen if I used simple wire for an antenna instead of
my ham radio RYBOKOV antenna.

I tossed a spool of 22 AWG magnet wire over a 20 foot high tree limb
and used a screw driver as a ground rod.

I heard all sorts of CW and also found some Spanish broadcast radio.
I have to wonder if Arnie was on the air tonight.

I am really liking this radio.

On 06/12/2016 01:19 PM, 'Leonard Meek' lemeek@... [regenrx] wrote:

□

Rob, if you use an IC like the LM386, be sure to use an emitter (source, cathode) follower between it and the tube circuit to match the impedance as Dave Newkirk suggested. Take a look at my Mk.21 in the Files section. The component values I used may not be optimum but it works surprisingly well.

Leonard

----- Original Message -----
From: Rob roomberg@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Saturday, June 11, 2016 10:50 PM
Subject: Re: [regenrx] VK3YE's Ceramic Resonator Regen NO BUZZ all fixed

Senility Delay Therapy

hmmm.... an SDT....
My wife is going to be pissed when I tell her I got an SDT.

I've got ICs like LM386 and TDA7052 and discrete components like TIP31 and TIP32 and TL431 so I'm pretty sure I'm going to make some noise:

My experimental "goto" amplifier is a 9 volt guitar amplifier.
I found out that it uses a TDA7052 chip so I got some of them to play music or radio:

http://www.learnmorsecode.com/amp/index.html

On 06/12/2016 04:14 AM, Michael michael.setaazul@... [regenrx] wrote:

Congratlations, Rob!

We learn more each day, from our own and from each other's
endeavours. Fiddling with radios must be one of the best
senility delay therapies!

It will be interesting to hear how you tame the audio
and keep that hum at bay.

Michael

On 12.06.16 06:47, Rob roomberg@... [regenrx] wrote:
>
>
> All fixed
> new pictures and audio recording here:
> http://www.learnmorsecode.com/716/716.html
>
> I needed to experiment with the regeneration potentiometer values since
> I didn't have a 50K pot.
> First try at splitting the 50K in two using two 20K pots and soldering

> the tuning cap to the board
> AND THE BUZZ WAS GONE!!!!!!!!!!!!!!!!!
....
> Next task is an audio amplifier.

26625. Re: [regenrx] VK3YE's Ceramic Resonator Regen NO BUZZ all fixed

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-13 08:36:35 UTC
From: Michael
Topic: 25840 Message: 26625

In my head it is all coming together now...
- board layout
- earthing
- regen control
- 3819+386 AF

Methinks regeneration control voltage could be achieved with
a single voltage-divider pot and one resistor to the base.

Worth tinkering :
- two pots in series - one high R and one low R for fine regen control -
then, once optimised, replace the former with two fixed Rs;
- values of R to base;
- Cs around the resonator to optimise frequency range.

Michael

On 13.06.16 05:43, 'Leonard Meek' wrote:
>
> *Rob, the Mod 3d was the final version. ...
> The improvement in the 3d over the 3c was clearly noticeable,
> thanks to Dave Newkirk.

> http://www.learnmorsecode.com/regenx/LM/index.html
>
> http://www.learnmorsecode.com/716/VK3YEmodKB3BYT.jpg
>
> http://www.learnmorsecode.com/716/716.html

26626. Synchrodyne

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-13 10:25:45 UTC
From: krysatec@...
Topic: 26626 Message: 26626
Attachments: 1 described; binary payloads are missing from this source WARC

Hi all,

is there anyone who is interested also in synchrodyne?
I built more of them, usually on MW band and I also own involvement - no copies!
(These examples have just a description in Czech, sorry.)

Best regards, Jara "Rat", Czech republic

26628. Synchrodyne: a few photos

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-13 10:57:11 UTC
From: krysatec@...
Topic: 26628 Message: 26628
Attachments: 1 described; binary payloads are missing from this source WARC

Hi all, see attachement, best regards, Jara "Rat"

26629. ...and last photo

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-13 11:24:17 UTC
From: krysatec@...
Topic: 26629 Message: 26629
Attachments: 1 described; binary payloads are missing from this source WARC

here... Jara "Rat"

26630. LM MOD 3d 2N3819 Jfet replacement

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-13 15:06:13 UTC
From: Rob
Topic: 25840 Message: 26630

Can the 2N3819 be replaced with any of these (found in junk box)
MPF102
2N7000
J201
J301
J310

On 06/13/2016 04:36 AM, Michael michael.setaazul@...
[regenrx] wrote:
>
> In my head it is all coming together now...
> - board layout
> - earthing
> - regen control
> - 3819+386 AF
>
> Methinks regeneration control voltage could be achieved with
> a single voltage-divider pot and one resistor to the base.
>
> Worth tinkering :
> - two pots in series - one high R and one low R for fine regen control -
> then, once optimised, replace the former with two fixed Rs;
> - values of R to base;
> - Cs around the resonator to optimise frequency range.
>
> Michael
>
> On 13.06.16 05:43, 'Leonard Meek' wrote:
> >
> > *Rob, the Mod 3d was the final version. ...
> > The improvement in the 3d over the 3c was clearly noticeable,
> > thanks to Dave Newkirk.
>
> > http://www.learnmorsecode.com/regenx/LM/index.html
> >
> > http://www.learnmorsecode.com/716/VK3YEmodKB3BYT.jpg
> >
> > http://www.learnmorsecode.com/716/716.html
>
>

26631. Re: [regenrx] Synchrodyne [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-13 15:14:30 UTC
From: Michael
Topic: 26626 Message: 26631

Good to know you are still around, Jara!

Beautifully presented designs. You would not want to
see mine...

The synchrodyne design would certainly be of interest
to many of us, BUT we would need more text, descriptions,
analysis, comparison.

Basic English would be fine for most of us.
In technical contexts, online translations are often
more confusing than helpful...

Michael

On 13.06.16 11:25, krysatec@... [regenrx] wrote:

> is there anyone who is interested also in synchrodyne?
> I built more of them, usually on MW band and I also own involvement
> - no copies!
> (These examples have just a description in Czech, sorry.)
> Best regards, Jara "Rat", Czech republic

26632. Re: [regenrx] LM MOD 3d 2N3819 Jfet replacement

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-13 15:30:44 UTC
From: Michael
Topic: 25840 Message: 26632

In pre-shaving years I was gifted a few pre-production OC70s.
I would not have risked one of them without multiple wiring,
battery polarity and data checks...

From a SK I now I have clusters of three and four legged things
with manufacturer markings unknown to googlenet and friends.

After meter checks and headscratching, I just try one.
Most survive, many perform even.

Almost any jfet will behave in a jfet circuit, more or less,
including those listed below.

If you have enough for sacrificial research,
the benefit will be SDT at the very least

I am told there be data sheets out there, trapped in a web.
You don't have to buy 10000 from the Middle Kingdom
to get the data.

:-)

Michael

On 13.06.16 16:06, Rob roomberg@... [regenrx] wrote:
>
> Can the 2N3819 be replaced with any of these (found in junk box)
> MPF102
> 2N7000
> J201
> J301
> J310

26633. Re: [regenrx] LM MOD 3d 2N3819 Jfet replacement

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-13 15:43:43 UTC
From: Jim Scott
Topic: 25840 Message: 26633

The MPF102 will work for most applications.

2N5484 through 2N5486 are used to replace the MPF102 depending on application.

73,

Jim Scott
WB0IYC
Life Member ARRL
FISTS 15327
Joplin, MO EM27
http://www.wb0iyc.com

The whole universe is waiting...
http://www.jpl.nasa.gov/

-----Original Message-----
From: Rob roomberg@... [regenrx] [mailto:regenrx@yahoogroups.com]
Sent: Monday, June 13, 2016 10:06 AM
To: regenrx@yahoogroups.com
Subject: [regenrx] LM MOD 3d 2N3819 Jfet replacement

Can the 2N3819 be replaced with any of these (found in junk box)
MPF102
2N7000
J201
J301
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On 06/13/2016 04:36 AM, Michael michael.setaazul@... [regenrx] wrote:

In my head it is all coming together now...
- board layout
- earthing
- regen control
- 3819+386 AF

Methinks regeneration control voltage could be achieved with
a single voltage-divider pot and one resistor to the base.

Worth tinkering :
- two pots in series - one high R and one low R for fine regen control -
then, once optimised, replace the former with two fixed Rs;
- values of R to base;
- Cs around the resonator to optimise frequency range.

Michael

On 13.06.16 05:43, 'Leonard Meek' wrote:
>
> *Rob, the Mod 3d was the final version. ...
> The improvement in the 3d over the 3c was clearly noticeable,
> thanks to Dave Newkirk.

> http://www.learnmorsecode.com/regenx/LM/index.html
>
> http://www.learnmorsecode.com/716/VK3YEmodKB3BYT.jpg
>
> http://www.learnmorsecode.com/716/716.html

26634. Re: [regenrx] LM MOD 3d 2N3819 Jfet replacement

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-13 16:29:25 UTC
From: Rob
Topic: 25840 Message: 26634

Thanks Jim and Micheal.
I had stumbled onto this MPF102 and J310 3904 combo audio amplifier
http://www.learnmorsecode.com/regen2/n5ibregen.jpg

and got a few of them to experiment.

++
The MPF102 will work for most applications.
2N5484 through 2N5486 are used to replace the MPF102 depending on
application.
73,
Jim Scott
++

And head scratching....
I am all for recycling.... but .... now that I can buy 1,000 transistors
for $10
I have completely given up on ANY loose parts that are not labeled.
I relegate them to snipping off the stiff leads and using the leads as
wire wrap posts.

This particular circuit cost less than the KNIGHTSMITE I built 20 years ago
and performed 1,000 times better so I'll be playing with this circuit a lot.

On 06/13/2016 11:30 AM, Michael michael.setaazul@...
[regenrx] wrote:
>
> In pre-shaving years I was gifted a few pre-production OC70s.
> I would not have risked one of them without multiple wiring,
> battery polarity and data checks...
>
> >From a SK I now I have clusters of three and four legged things
> with manufacturer markings unknown to googlenet and friends.
>
> After meter checks and headscratching, I just try one.
> Most survive, many perform even.
>
> Almost any jfet will behave in a jfet circuit, more or less,
> including those listed below.
>
> If you have enough for sacrificial research,
> the benefit will be SDT at the very least
>
> I am told there be data sheets out there, trapped in a web.
> You don't have to buy 10000 from the Middle Kingdom
> to get the data.

>
> :-)
>
> Michael
>
> On 13.06.16 16:06, Rob roomberg@... [regenrx] wrote:
> >
> > Can the 2N3819 be replaced with any of these (found in junk box)
> > MPF102
> > 2N7000
> > J201
> > J301
> > J310
>
>

26635. Re: [regenrx] ...and last photo [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-13 17:05:55 UTC
From: Leonard Meek
Topic: 26635 Message: 26635

Jara, I would like to see your schematic.

Leonard

----- Original Message -----
From: krysatec@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Monday, June 13, 2016 1:24 AM
Subject: [regenrx] ...and last photo [1 Attachment]

here... Jara "Rat"

26636. Re: [regenrx] LM MOD 3d 2N3819 Jfet replacement

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-13 17:13:26 UTC
From: Leonard Meek
Topic: 25840 Message: 26636

Rob, I'm not sure. Those FET's are pretty high gain and may not be suitable for follower service. But you never know until you try them. Personally, I would opt for a more general purpose FET. I know cathode followers have transconductance requirements but I'm not sure about semiconductors.

Leonard

----- Original Message -----
From: Rob roomberg@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Monday, June 13, 2016 5:06 AM
Subject: [regenrx] LM MOD 3d 2N3819 Jfet replacement

Can the 2N3819 be replaced with any of these (found in junk box)
MPF102
2N7000
J201
J301
J310

On 06/13/2016 04:36 AM, Michael michael.setaazul@btopenworld.com [regenrx] wrote:

In my head it is all coming together now...
- board layout
- earthing
- regen control
- 3819+386 AF

Methinks regeneration control voltage could be achieved with
a single voltage-divider pot and one resistor to the base.

Worth tinkering :
- two pots in series - one high R and one low R for fine regen control -
then, once optimised, replace the former with two fixed Rs;
- values of R to base;
- Cs around the resonator to optimise frequency range.

Michael

On 13.06.16 05:43, 'Leonard Meek' wrote:
>
> *Rob, the Mod 3d was the final version. ...
> The improvement in the 3d over the 3c was clearly noticeable,
> thanks to Dave Newkirk.

> http://www.learnmorsecode.com/regenx/LM/index.html
>

> http://www.learnmorsecode.com/716/VK3YEmodKB3BYT.jpg
>
> http://www.learnmorsecode.com/716/716.html

26637. "DC SW-3 Modified for Long Wave Receiver"

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-14 04:24:56 UTC
From: Hubert Miller
Topic: 26637 Message: 26637

When i mentioned that I had a schematic captioned "DC SW-3 Modified for Long Wave Receiver", a couple

people asked for the circuit. I do not have a scan available, but description follows. This paper came from

an estate of a man, Royal "Bill" Zinn, who had been a radio operator in the mid 1930s for Alaska Steamship

Company, and later ran an electronics surplus store in West Seattle in the 1950s. I also have some repair

logs documenting ship installations which mention the SW-3, so there's no maybe about it. I believe at

the outset of WW2, Alaska Steam replaced its elderly IP-501 receivers with the SW-3. Alaska Steam had

something like 5 ships running from Seattle up to Alaskan ports. I am guessing by the choice of tubes in

this set, the 78s, that it dates from around 1934-1935.

The "modified DC SW-3" uses tubes 78, 78, 76. There is no attenuator pot in the antenna circuit; RF gain

is by a 300R + 50kR pot in the 78 RF cathode. The detector coil has the feedback winding coming from the

78 cathode to ground. The 78 regeneration control is a 50k pot between ground and the +67.5 battery tap.

The RF 78 screen comes from a +22.5 volt tap on the battery. I don't see this battery voltage tap on the

other published SW-3 schematics. I'm pretty sure the A.S.S.Co. SW-3s were only equipped with coils to

cover the 500 kHz frequency. The HF receiver on these ships seems to have been the Sargent 10, also a

regen. One doc lists an passenger lounge radio, a home-entertainment superhet type; it might seem a

little odd to provide a more modern receiver for this nonessential use.

-Hue Miller

26638. RE: "DC SW-3 Modified for Long Wave Receiver"

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-14 04:36:17 UTC
From: Hubert Miller
Topic: 26637 Message: 26638

I forgot to mention this also: I do NOT know why these changes were made. It would seem

that the SW-3 was okay as-is, but Alaska Steam for some reason decided to modify several

of them.

I have never seen one of this particular modification. I bought a bunch of paper and hardware

from his widow, but then i moved to Omaha for a spell. Years later, at a radio swapmeet,

another fellow told me at the final-final estate sale, after Mrs. Zinn passed away, "They

found a number of SW-3's in cardboard boxes in the loft above the garage".

-Hue Miller

26639. Synchrodyne in english

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-14 10:48:46 UTC
From: krysatec@...
Topic: 26639 Message: 26639
Attachments: 2 described; binary payloads are missing from this source WARC

Hi all, here is my last synchrodyne for MW band. You need cca 5meter wire as antenna for near stations. Audioamplifier with 2xE88CC is my modification from russian schematics.

Best regards, Jara "Rat"

26640. Regen-synchrodyne for MW

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-14 11:10:11 UTC
From: krysatec@...
Topic: 26640 Message: 26640
Attachments: 4 described; binary payloads are missing from this source WARC

Hi all, here is interesting construction from Russia. Work as regen or as synchrodyne by setting. Very good construction! (But you must try coils).
It work better than ECH/PCH synchrodynes. No untuned preamplifier here.
And you can set it as "only regen" or as "synchrodyne too!!"
However, you must have a coil for feedback and for antenna.

I hope you find it helpful

Best regards, Jara "Rat"!

26641. Filling the Vacuum

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-14 18:17:40 UTC
From: vacuumtubemuseum@...
Topic: 26641 Message: 26641

Please let me know how we can improve the new Filling the Vacuum magazine for the Museum. We will be producing the next issue as soon as we receive the ISSN number. Please send in interesting tube-related articles. And please also consider becoming a regular contributor, or an official columnist. The access link is: Filling the Vacuum. http://vacuumtubemuseum.org/filling-the-vacuum/

http://vacuumtubemuseum.org/filling-the-vacuum/

Filling the Vacuum http://vacuumtubemuseum.org/filling-the-vacuum/ Filling the Vacuum* Celebrating the History, Beauty and Science of Tubes The magazine of the International Vacuum Tube Museum… Dedicated to the Past,...

View on vacuumtubemuseu... http://vacuumtubemuseum.org/filling-the-vacuum/
Preview by Yahoo

26642. Re: [regenrx] 1.5mH scramble or not scramble ... SINGLE ENDED AUDIO transformer

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-14 21:33:16 UTC
From: Daniel Donnelly
Topic: 26507 Message: 26642

Inregards to the home brew choke question.
I was a QC engineer for a transformer and capacitor manufacturing co in mexico. The thing about mexico is the attitude of engineers, practicality is the only important factor.Calculations would be made and then the choke or transformer would be built and tested ... with in the end, no matter what the calculations said, the # of turns would be varied to get the result needed. The result was excellent components sometimes made almost by hand.
I say that because while production runs were on standard wire lathes, if a prototype was needed (and the winding machines were all in use) I have seen prototype chokes and transformers made in one evening using nothing more than a slow speed drill held in a vice and an armature supported on a wooden block.
The point is that fancy equipment is not needed to produce an excellent one of a kind product.
What is needed is good components, patience and (especially) care in winding the layers of wire.
And no for power line frequencies the choke CANNOT be scramble wound.
Dan
.

On Sat, May 28, 2016 at 6:53 PM, Rob roomberg@ptd.net [regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> Very interesting discussion here.
> This is a single ended audio transformer from tubesandmore.com
>
> ....and it shows that the primary is good for 6V6,6AQ5/A plate voltage.....
> so I figure it would be happy for power supply ripple smoothing to those
> same tubes :
> cost $14
> https://www.tubesandmore.com/products/P-T31
>
> noting that a real 1.5 H choke costs $15
> https://www.tubesandmore.com/products/P-T156R
>
> so if you want the real thing its pretty much nearly the same cost
> BUT
> IF you were not buying chokes and just building with on hand parts.....
> and I do have that audio transformer in my parts stash.....
> it was good to learn that transformer COULD be used to build the power
> supply ripple filter.

>
>
>
>
>
> On 05/28/2016 03:12 PM, 'Leonard Meek' lemeek@... [regenrx]
> wrote:
>
>
>
> □
> You could connect primary & secondary in series (properly phased) for a
> little more inductance, but not much DC handling ability.
>
> ----- Original Message -----
> *From:* J Ed jedwardsat1@... [regenrx]
> <jedwardsat1@...%20[regenrx]>
> *To:* <regenrx@yahoogroups.com>regenrx@yahoogroups.com
> *Sent:* Saturday, May 28, 2016 9:09 AM
> *Subject:* Re: [regenrx] Re: Walmart wire home brew choke is 1.5mH
> scramble or not scramble
>
> An SE audio transformer should work well, as they are gapped for primary
> current. A power transformer would need to be modified to tolerate such
> current. The secondary, left open, would pose no problem but would take up
> room that could be used for more primary wire.
>
> Ed AE7TE
> On May 28, 2016 11:20 AM, "Michael michael.setaazul@...
> [regenrx]" <regenrx@yahoogroups.com> wrote:
>
>>
>>
>>
>> Should it not be feasible to use the primary winding of a
>> mains or audio output transformer? If so, what kind of
>> transformer would perform better than a chunky resistor?
>>
>> Michael
>> 8339
>>
>> On 28.05.16 19:13, J Ed <jedwardsat1@...>jedwardsat1@...
>> [regenrx] wrote:
>> >
>> >
>> > Don't. If you wanted a coil for 2 MHZ, scramble winding would make more
>> > sense. To remove low frequency signals from your DC, wind the wire in
>> > nice even layers. That will allow more inductance and let you get more
>> > wire in the tiny little core window.

>> >
>> > __
>> >
>> >
>> > I'm confused by this statement:
>> >
>> > On 05/28/2016 12:49 PM, J Ed <jedwardsat1@...>
>> jedwardsat1@gmail.com
>> > <mailto:jedwardsat1@...> [regenrx] wrote:
>> >> Another thing...scramble winding the wires will result in a lower
>> >> inductance than if you lay the wire side by side in neat rows. This is
>> >> unwanted at RF but we're working at DC now.
>> >
>> > So... DO scramble wind or do NOT scramble wind for DC ripple flattening
>> > choking ?
>> >
>>
>
>
>

26643. Re: [regenrx] 1.5mH scramble or not scramble ... SINGLE ENDED AUDIO transformer

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-14 21:55:00 UTC
From: Rob
Topic: 26507 Message: 26643

So considering the hands on approach..... simple hand tools.....
I was wondering if a single layer of wires.... not scrambled.... should
be wound and then should that layer be covered with
tape... and the next layer wound , then tape again.......
to get an extremely uniform choke.
I say tape...just because my antique choke looks like all layers are
separated by tape.
BUT
I was wondering if the layers could be separated by KAPTON tape.

http://www.learnmorsecode.com/regenx/choke/chokes2.jpg
Another interesting note... the huge size of the antique compared to the
brand new choke.

Next one I wind will be with 32AWG instead of the thick 22AWG wire.
the antique choke arrived in the mail and I peeled it apart to examine
what gauge wire was in
and compared it to 26 gauge wire and then
concluded it was definitely made with something much thinner.
http://www.learnmorsecode.com/regenx/choke/index.html

I sort of shelved the tube rig choke research while I waited for 0C3
tubes to arrive in the mail
and to do some metal work... rebuild an attic air conditioner:
http://www.learnmorsecode.com/air/index.html

On 06/14/2016 05:33 PM, Daniel Donnelly KC7VDA@... [regenrx] wrote:
> Inregards to the home brew choke question.
> I was a QC engineer for a transformer and capacitor manufacturing co
> in mexico. The thing about mexico is the attitude of engineers,
> practicality is the only important factor.Calculations would be made
> and then the choke or transformer would be built and tested ... with
> in the end, no matter what the calculations said, the # of turns
> would be varied to get the result needed. The result was excellent
> components sometimes made almost by hand.
> I say that because while production runs were on standard wire lathes,
> if a prototype was needed (and the winding machines were all in use)
> I have seen prototype chokes and transformers made in one evening
> using nothing more than a slow speed drill held in a vice and an
> armature supported on a wooden block.
> The point is that fancy equipment is not needed to produce an
> excellent one of a kind product.
> What is needed is good components, patience and (especially) care in
> winding the layers of wire.

> And no for power line frequencies the choke CANNOT be scramble wound.
> Dan
> .
>
> On Sat, May 28, 2016 at 6:53 PM, Rob roomberg@...
> <mailto:roomberg@...> [regenrx] <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>> wrote:
>
> Very interesting discussion here.
> This is a single ended audio transformer from tubesandmore.com
> <http://tubesandmore.com>
>
> ....and it shows that the primary is good for 6V6,6AQ5/A plate
> voltage.....
> so I figure it would be happy for power supply ripple smoothing to
> those same tubes :
> cost $14
> https://www.tubesandmore.com/products/P-T31
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> noting that a real 1.5 H choke costs $15
> https://www.tubesandmore.com/products/P-T156R
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> so if you want the real thing its pretty much nearly the same cost
> BUT
> IF you were not buying chokes and just building with on hand
> parts.....
> and I do have that audio transformer in my parts stash.....
> it was good to learn that transformer COULD be used to build the
> power supply ripple filter.
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> On 05/28/2016 03:12 PM, 'Leonard Meek' lemeek@...
> <mailto:lemeek@...> [regenrx] wrote:
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>> You could connect primary & secondary in series (properly phased)
>> for a little more inductance, but not much DC handling ability.
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>> ----- Original Message -----
>> *From:* J Ed jedwardsat1@... [regenrx]
>> <mailto:jedwardsat1@...%20[regenrx]>
>> *To:* regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>
>> *Sent:* Saturday, May 28, 2016 9:09 AM
>> *Subject:* Re: [regenrx] Re: Walmart wire home brew choke is
>> 1.5mH scramble or not scramble

>>
>> An SE audio transformer should work well, as they are gapped
>> for primary current. A power transformer would need to be
>> modified to tolerate such current. The secondary, left open,
>> would pose no problem but would take up room that could be
>> used for more primary wire.
>>
>> Ed AE7TE
>>
>> On May 28, 2016 11:20 AM, "Michael
>> michael.setaazul@...
>> <mailto:michael.setaazul@...> [regenrx]"
>> <regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>> wrote:
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>> Should it not be feasible to use the primary winding of a
>> mains or audio output transformer? If so, what kind of
>> transformer would perform better than a chunky resistor?
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>> Michael
>> 8339
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>> On 28.05.16 19:13, J Ed jedwardsat1@...
>> <mailto:jedwardsat1@...> [regenrx] wrote:
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>> > Don't. If you wanted a coil for 2 MHZ, scramble winding
>> would make more
>> > sense. To remove low frequency signals from your DC,
>> wind the wire in
>> > nice even layers. That will allow more inductance and
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>> > wire in the tiny little core window.
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>> > I'm confused by this statement:
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>> > On 05/28/2016 12:49 PM, J Ed jedwardsat1@...
>> <mailto:jedwardsat1@...>
>> > <mailto:jedwardsat1@...
>> <mailto:jedwardsat1@...>> [regenrx] wrote:
>> >> Another thing...scramble winding the wires will result
>> in a lower
>> >> inductance than if you lay the wire side by side in
>> neat rows. This is
>> >> unwanted at RF but we're working at DC now.
>> >

>> > So... DO scramble wind or do NOT scramble wind for DC
>> ripple flattening
>> > choking ?
>> >
>>
>
>
>

26644. Re: [regenrx] LM MOD 3d 2N3819 Jfet replacement

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-15 00:39:00 UTC
From: Rob
Topic: 25840 Message: 26644

I remembered where I had found J310:

http://theradioboard.com/rb/viewtopic.php?t=5800
original MPF102 circuit
https://sites.google.com/a/noratel.co.uk/ray/1971%20FET%20Regen_.jpg
built with J310 and mods
https://sites.google.com/a/noratel.co.uk/ray/1971%20FET%20Regen%20mods_.jpg

On 06/13/2016 12:29 PM, Rob roomberg@... [regenrx] wrote:
>
> Thanks Jim and Micheal.
> I had stumbled onto this MPF102 and J310 3904 combo audio amplifier
> http://www.learnmorsecode.com/regen2/n5ibregen.jpg
>
> and got a few of them to experiment.
>
>
> ++
> The MPF102 will work for most applications.
> 2N5484 through 2N5486 are used to replace the MPF102 depending on
> application.
> 73,
> Jim Scott
> ++
>
>
> And head scratching....
> I am all for recycling.... but .... now that I can buy 1,000
> transistors for $10
> I have completely given up on ANY loose parts that are not labeled.
> I relegate them to snipping off the stiff leads and using the leads as
> wire wrap posts.
>
>
> This particular circuit cost less than the KNIGHTSMITE I built 20
> years ago
> and performed 1,000 times better so I'll be playing with this circuit
> a lot.
>
>
> On 06/13/2016 11:30 AM, Michael michael.setaazul@...
> [regenrx] wrote:
>>
>> In pre-shaving years I was gifted a few pre-production OC70s.
>> I would not have risked one of them without multiple wiring,

>> battery polarity and data checks...
>>
>> >From a SK I now I have clusters of three and four legged things
>> with manufacturer markings unknown to googlenet and friends.
>>
>> After meter checks and headscratching, I just try one.
>> Most survive, many perform even.
>>
>> Almost any jfet will behave in a jfet circuit, more or less,
>> including those listed below.
>>
>> If you have enough for sacrificial research,
>> the benefit will be SDT at the very least
>>
>> I am told there be data sheets out there, trapped in a web.
>> You don't have to buy 10000 from the Middle Kingdom
>> to get the data.
>>
>> :-)
>>
>> Michael
>>
>> On 13.06.16 16:06, Rob roomberg@... [regenrx] wrote:
>> >
>> > Can the 2N3819 be replaced with any of these (found in junk box)
>> > MPF102
>> > 2N7000
>> > J201
>> > J301
>> > J310
>>
>
>

26645. Re: Regen-synchrodyne for MW

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-15 05:15:56 UTC
From: krysatec@...
Topic: 26640 Message: 26645
Attachments: 1 described; binary payloads are missing from this source WARC

Sorry, here is better schematics with anode resistors

26646. TRF to REGEN

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-15 14:45:43 UTC
From: Tim Haake
Topic: 26646 Message: 26646

I have collected over the years a few TRF receivers. Several are real beauties and a few need the whole gammit of wood restoration. In all they may have been a marvel of the day but a pain to use on any regular basis, at least for me.
SO, I am thinking about taking probably one of my "3-dials" since that's mostly what I have, and not a pretty one, and making it a regen to see what I come up with on the BC bands.
Has anyone put any effort serious or otherwise with making a conversion like this? I've got several Ideas on doing it but want hopefully some comments if anyone wants. After all the big intent of those designs was NOT to make the amplifiers interact with each other.
 Close to a regen but no cigar. Wonder what the thinking was?
TIM

26647. Re: TRF to REGEN

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-16 00:31:13 UTC
From: b_weeber@...
Topic: 26646 Message: 26647

Dear Tim

What a shame, don't destroy a working receiver. There are a few other possibilities. Either you exchange one receiver with somebody else. You could build a regen receiver by yourself, using more modern tubes.
Or you could buy one from ebay, this is an example only, have a look:
Very Rare, Vintage National SW-3 Regenerative Receiver - 1930s http://www.ebay.com/itm/Very-Rare-Vintage-National-SW-3-Regenerative-Receiver-1930s/182168693745

http://www.ebay.com/itm/Very-Rare-Vintage-National-SW-3-Regenerative-Receiver-1930s/182168693745

Very Rare, Vintage National SW-3 Regenerative Receive... http://www.ebay.com/itm/Very-Rare-Vintage-National-SW-3-Regenerative-Receiver-1930s/182168693745 This auction is for a very rare, National SW-3 Regenerative Receiver. This receiver is a 1930s era radio. For its age, the radio is in very good condition as the pi...

View on www.ebay.com http://www.ebay.com/itm/Very-Rare-Vintage-National-SW-3-Regenerative-Receiver-1930s/182168693745
Preview by Yahoo

Best regards,
Bernd

26648. Re: [regenrx] Re: TRF to REGEN

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-16 01:00:57 UTC
From: John
Topic: 26646 Message: 26648

A few issues with this ad. SW-3's are not "very rare." That's eBay hype. Also, the seller should have specified which coil set is in the set. Also, I wonder what kind of shape the under-chassis area is in, and if the bottom cover is included. They are missing sometimes.

You I'm only putting in my two cents because I have some experience with SW-'s. Great little sets. Not abundant like S-38's or S-40's, but not "very rare." But they are getting hard to find in nice condition.

Sent from my CRM-114

> On Jun 15, 2016, at 8:31 PM, b_weeber@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
> Dear Tim
>
> What a shame, don't destroy a working receiver. There are a few other possibilities. Either you exchange one receiver with somebody else. You could build a regen receiver by yourself, using more modern tubes.
> Or you could buy one from ebay, this is an example only, have a look:
> Very Rare, Vintage National SW-3 Regenerative Receiver - 1930s
>
>
> Very Rare, Vintage National SW-3 Regenerative Receive...
> This auction is for a very rare, National SW-3 Regenerative Receiver. This receiver is a 1930s era radio. For its age, the radio is in very good condition as the pi...
> View on www.ebay.com
> Preview by Yahoo
>
>
> Best regards,
> Bernd
>

26649. RE: [regenrx] Re: TRF to REGEN

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-16 01:07:07 UTC
From: Hubert Miller
Topic: 26646 Message: 26649

Everything sold on Ebay is “Very Rare”, if it’s no longer being manufactured.

The photos on that listing are pretty crappy. Hard to tell what’s discoloration, camera effects, or rust.

Would have been easy enough for the seller to pull the tubes and coils and look for identifiers. But

that’s beyond many people’s ability.

-Hue

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Wednesday, June 15, 2016 6:01 PM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Re: TRF to REGEN

A few issues with this ad. SW-3's are not "very rare." That's eBay hype. Also, the seller should have specified which coil set is in the set. Also, I wonder what kind of shape the under-chassis area is in, and if the bottom cover is included. They are missing sometimes.

You I'm only putting in my two cents because I have some experience with SW-'s. Great little sets. Not abundant like S-38's or S-40's, but not "very rare." But they are getting hard to find in nice condition.

·–’–––

26650. Re: [regenrx] Re: TRF to REGEN

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-16 01:13:27 UTC
From: John
Topic: 26646 Message: 26650

Hi Hue,

Right on.

And only 4 screws hold the bottom cover on. How hard would it be to remove the cover and take a picture?

Regards,

John

Sent from my CRM-114

> On Jun 15, 2016, at 9:07 PM, Hubert Miller kargo_cult@msn.com [regenrx] <regenrx@yahoogroups.com> wrote:
>
> Everything sold on Ebay is “Very Rare”, if it’s no longer being manufactured.
>
> The photos on that listing are pretty crappy. Hard to tell what’s discoloration, camera effects, or rust.
>
> Would have been easy enough for the seller to pull the tubes and coils and look for identifiers. But
>
> that’s beyond many people’s ability.
>
> -Hue
>
>
>
> From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
> Sent: Wednesday, June 15, 2016 6:01 PM
> To: regenrx@yahoogroups.com
> Subject: Re: [regenrx] Re: TRF to REGEN
>
>
>
>
>
>
> A few issues with this ad. SW-3's are not "very rare." That's eBay hype. Also, the seller should have specified which coil set is in the set. Also, I wonder what kind of shape the under-chassis area is in, and if the bottom cover is included. They are missing sometimes.
>
>
>
> You I'm only putting in my two cents because I have some experience with SW-'s. Great

little sets. Not abundant like S-38's or S-40's, but not "very rare." But they are getting hard to find in nice condition.
>
>
>
> ._,___
>
>

26651. Re: TRF to REGEN

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-16 10:39:16 UTC
From: dawmast@...
Topic: 26646 Message: 26651

You can easily convert a TRF receiver to a regenerative one by connecting a Q-Multiplier onto the final tank circuit of the TRF. A very simple, but a versatile Q-Multiplier can be made with a differential pair, see schematic below.

http://www.uploadarchief.net/files/download/q-multiplier.gif
http://www.uploadarchief.net/files/download/q-multiplier.gif

http://www.uploadarchief.net/files/download/q-multiplier.gif

http://www.uploadarchief.net/files/download/q-multiplier...
http://www.uploadarchief.net/files/download/q-multiplier.gif

View on www.uploadarchief.net http://www.uploadarchief.net/files/download/q-multiplier.gif
Preview by Yahoo

26652. Re: [regenrx] Re: TRF to REGEN

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-16 18:11:49 UTC
From: Bob L.
Topic: 26646 Message: 26652

Just curious, looking at the Q-multiplier circuit, and being somewhat familiar with TRF receivers, how does one tie the Q-multiplier shown in the schematic to the final tank circuit. I assume the circuit shown connects to the detector's tuned circuit some how.
 Bob L.

From: "dawmast@... [regenrx]" <regenrx@yahoogroups.com>
To: regenrx@yahoogroups.com
Sent: Thursday, June 16, 2016 6:39 AM
Subject: [regenrx] Re: TRF to REGEN

  You can easily convert a TRF receiver to a regenerative one by connecting a Q-Multiplier onto the final tank circuit of the TRF. A very simple, but a versatile Q-Multiplier can be made with a differential pair, see schematic below.

http://www.uploadarchief.net/files/download/q-multiplier.gif
| |
| | | | http://www.uploadarchief.net/files/download/q-multiplier... | |
| View on www.uploadarchief.net | Preview by Yahoo |
| |

26654. Re: TRF to REGEN

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-17 06:57:58 UTC
From: dawmast@...
Topic: 26646 Message: 26654

L1 in the schematic of the Q-Multiplier above is the actual final detector tank coil of the TRF receiver to which the Q-Multiplier is connected.

26655. Piscataway

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-17 16:05:51 UTC
From: johnhutnick@...
Topic: 26655 Message: 26655

The annual Piscataway NJ high school amateur radio show is tomorrow at 8am.

HAMFEST http://www.w2qw.org/hamfest.htm

http://www.w2qw.org/hamfest.htm

HAMFEST http://www.w2qw.org/hamfest.htm Saturday, June 18, 2016 8AM to 12PM Piscataway High School Lot# 11/12 Hoes Lane & Behmer Road Piscataway, New Jersey Talk-in: 146.625 - pl 141.3 &nb...

View on www.w2qw.org http://www.w2qw.org/hamfest.htm
Preview by Yahoo

26656. 716 regen and wire wrap

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-18 03:18:04 UTC
From: Rob
Topic: 26452 Message: 26656

I got a dirt cheap rechargeable electric screwdriver.
The smallest one made.
Put masking tape around the ink cartridge to make it fat enough to
center it snug in the bit holder then some masking tape holding it
secure and tape on the direction selector to never trip it out of
forward direction.

This wire is 22AWG magnet wire.
picture :
http://www.learnmorsecode.com/716/wirewrapelectricscrewdriver.jpg
http://www.learnmorsecode.com/716/716.html

Kids could do this.
I don't mean make the tool....
I mean WE make the tools and then do point to point wiring builds with
the kids
using these tools..... and take home a radio... without soldering.
I liked the 22AWG magnet wire.
Its thick enough to not be as fragile as the 30AWG wirewrap wire while
still being thin enough
to spin down and coil on a pin.... or component lead.

I brought this 40 meter regen to my local ham club meeting last night
and hooked up an antenna and
ground for show and tell.
AND
brought the wire wrap tools and a few guys played with the tools.
One of the hams did show us proper methods because he built IBM 360
mainframe
computers with wire wrap for 20 years. I thought that was cool.

It seems the square pins are the "gotcha" with this technology.
The pins cost 10 cents each. No way around it.
So if you build a board with 100 pins it WILL cost $10.
Does anyone know of a similar type of pin for wirewrapping that pushes
into a board
and costs pennies, not dimes ?

26658. 716 regen and wire wrap 2X20K pots with NO 220K resistor

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-18 15:55:34 UTC
From: Rob
Topic: 26452 Message: 26658

Can any of our "non-beginners" here give me any instructions about this concern?
I am not an electrical engineer. I am a amateur radio hobby electronics dabbler.

The circuit works great with the two pots set at halfway points .... around ...10K.
What measurement should I do to figure out if there is too much current or voltage on what parts?

AND
If I were to replace ONE pot with a fixed 10K resistor....
which pot would that be? The one attached to the power rail or the one attached to the ground rail?

I definitely agree that turning the two 20K pots to zero will short the 9volt battery to ground.
BUT
the purpose of those two pots was to find a regenerative value resistance that worked without
the 50K ohm pot... just because I didn't have a 50K pot.
My first pass at this circuit had one 220K resistor in series with one 27K ohm resistor and then one 20K
pot.
It was my way of getting away with not have a 50K pot.
BUT
I got no regeneration at all until I removed the 220K resistance from the regeneration circuit.
As soon as I removed that 220K resistor ...it came to life.
So then I figured that TWO 20K pots could be used to better tweak what value actually worked.
Which gelled into retiring the 220K and 27K resistors.
http://www.learnmorsecode.com/716/VK3YEmodKB3BYT.jpg

I am not alone in this 220K resistor being dropped out of the circuit to make it work.
See here:
http://www.learnmorsecode.com/716/JA9MAT716C.jpg

On 06/18/2016 07:24 AM, 'John O'Donnell' jod2005@... [regenrx]
wrote:
>
> □
>
> Hi Rob,
> I'm a bit concerned with what you have done with the 2 x 20k pots.

> The way you have set them up the V+ could be shorted directly to
> ground, this could drain and damage the battery, not to mention what
> it must be doing to the bias of the second transistor. I think you
> should have kept the 220k resistor in place. But then I could be
> wrong, I'm just a beginner!
> John
>

26659. Re: 716 regen and wire wrap

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-18 16:24:23 UTC
From: Kenneth Ketner
Topic: 26452 Message: 26659

You could get some old Timey Square copper bus wire, cut a half inch or so, mount, and wire wrap. Antique radio supply (www.tubesandmore) has it. Used in the twenties radio sets. It is about 1/16 inch square cross section. Other gauges might be available.

Ken Ketner
KA5ELD
PO Box 65135
Lubbock, TX 79464-5135
Sent from my iPad

26660. Re: [regenrx] 716 regen and wire wrap 2X20K pots with NO 220K resistor

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-18 17:18:54 UTC
From: Leonard Meek
Topic: 26452 Message: 26660

I don't see the need for two 20K pots, even if it's a dual pot. Just ground the bottom of the upper pot and get rid of the lower pot.

Leonard

----- Original Message -----
From: Rob roomberg@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Saturday, June 18, 2016 5:55 AM
Subject: [regenrx] 716 regen and wire wrap 2X20K pots with NO 220K resistor

Can any of our "non-beginners" here give me any instructions about this concern?
I am not an electrical engineer. I am a amateur radio hobby electronics dabbler.

The circuit works great with the two pots set at halfway points .... around ...10K.
What measurement should I do to figure out if there is too much
current or voltage on what parts?

AND
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http://www.learnmorsecode.com/716/JA9MAT716C.jpg

On 06/18/2016 07:24 AM, 'John O'Donnell' jod2005@... [regenrx] wrote:

☐

Hi Rob,

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John

26661. Re: [regenrx] 716 regen and wire wrap 2X20K pots with NO 220K resistor

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-18 17:45:23 UTC
From: Daniel Donnelly
Topic: 26452 Message: 26661

When making a modification involving two pots in series I usually put a 5 k 1/4 w resistor on the ground side.just to make sure that I don't accidentally short out the power supply.
one other thing that you might try is to replace the 20 k pot on the ground side with a 5 k pot and use that pot as a vernier contrlol.
I have done that several times on "genny's" that wsnted to "snap" into oscillation. It seems to work very well and makes it easy to control the regenerative action.

Dan

On Sat, Jun 18, 2016 at 10:18 AM, 'Leonard Meek' lemeek@... [regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> □
> *I don't see the need for two 20K pots, even if it's a dual pot. Just
> ground the bottom of the upper pot and get rid of the lower pot.*
>
> *Leonard*
>
>
> ----- Original Message -----
> *From:* Rob roomberg@... [regenrx] <roomberg@...+[regenrx]>
> *To:* regenrx@yahoogroups.com
> *Sent:* Saturday, June 18, 2016 5:55 AM
> *Subject:* [regenrx] 716 regen and wire wrap 2X20K pots with NO 220K
> resistor
>
> Can any of our "non-beginners" here give me any instructions about this
> concern?
> I am not an electrical engineer. I am a amateur radio hobby electronics
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> The circuit works great with the two pots set at halfway points ....
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> What measurement should I do to figure out if there is too much
> current or voltage on what parts?
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> AND
> If I were to replace ONE pot with a fixed 10K resistor....
> which pot would that be? The one attached to the power rail or the one
> attached to the ground rail?

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> I definitely agree that turning the two 20K pots to zero will short the
> 9volt battery to ground.
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> the purpose of those two pots was to find a regenerative value resistance
> that worked without
> the 50K ohm pot... just because I didn't have a 50K pot.
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> It was my way of getting away with not have a 50K pot.
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> So then I figured that TWO 20K pots could be used to better tweak what
> value actually worked.
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> http://www.learnmorsecode.com/716/VK3YEmodKB3BYT.jpg
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> I am not alone in this 220K resistor being dropped out of the circuit to
> make it work.
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>
>
> On 06/18/2016 07:24 AM, 'John O'Donnell' jod2005@... [regenrx]
> wrote:
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>
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> □
> Hi Rob,
>
> I'm a bit concerned with what you have done with the 2 x 20k pots. The
> way you have set them up the V+ could be shorted directly to ground, this
> could drain and damage the battery, not to mention what it must be doing to
> the bias of the second transistor. I think you should have kept the 220k
> resistor in place. But then I could be wrong, I'm just a beginner!
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> John
>
>
>
>

26662. Re: [regenrx] 716 regen and wire wrap 2X20K pots with NO 220K resistor

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-18 18:27:28 UTC
From: Leonard Meek
Topic: 26452 Message: 26662

An even better idea.

Leonard

----- Original Message -----
From: Daniel Donnelly KC7VDA@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Saturday, June 18, 2016 7:45 AM
Subject: Re: [regenrx] 716 regen and wire wrap 2X20K pots with NO 220K resistor

When making a modification involving two pots in series I usually put a 5 k 1/4 w resistor on the ground side.just to make sure that I don't accidentally short out the power supply. one other thing that you might try is to replace the 20 k pot on the ground side with a 5 k pot and use that pot as a vernier contrlol.
I have done that several times on "genny's" that wsnted to "snap" into oscillation. It seems to work very well and makes it easy to control the regenerative action.

Dan

On Sat, Jun 18, 2016 at 10:18 AM, 'Leonard Meek' lemeek@... [regenrx]
<regenrx@yahoogroups.com> wrote:

☐

I don't see the need for two 20K pots, even if it's a dual pot. Just ground the bottom of the upper pot and get rid of the lower pot.

Leonard

----- Original Message -----
From: Rob roomberg@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Saturday, June 18, 2016 5:55 AM
Subject: [regenrx] 716 regen and wire wrap 2X20K pots with NO 220K resistor

Can any of our "non-beginners" here give me any instructions about this concern?
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I am not alone in this 220K resistor being dropped out of the circuit to make it work.
See here:
http://www.learnmorsecode.com/716/JA9MAT716C.jpg

On 06/18/2016 07:24 AM, 'John O'Donnell' jod2005@... [regenrx] wrote:

☐

Hi Rob,

I'm a bit concerned with what you have done with the 2 x 20k pots. The way you have set them up the V+ could be shorted directly to ground, this could drain and damage the battery, not to mention what it must be doing to the bias of the second transistor. I think you should have kept the 220k resistor in place. But then I could be wrong, I'm just a beginner!

John

26663. Re: [regenrx] 716 regen and wire wrap 2X20K pots with NO 220K resistor

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-18 19:14:42 UTC
From: Rob
Topic: 26452 Message: 26663

Thanks.. Dan and Leonard..... I can do these experiments.

On 06/18/2016 01:45 PM, Daniel Donnelly KC7VDA@... [regenrx] wrote:
> When making a modification involving two pots in series I usually put
> a 5 k 1/4 w resistor on the ground side.just to make sure that I don't
> accidentally short out the power supply.
> one other thing that you might try is to replace the 20 k pot on the
> ground side with a 5 k pot and use that pot as a vernier contrlol.
> I have done that several times on "genny's" that wsnted to "snap" into
> oscillation. It seems to work very well and makes it easy to control
> the regenerative action.
>
> Dan
>
> On Sat, Jun 18, 2016 at 10:18 AM, 'Leonard Meek'
> lemeek@... <mailto:lemeek@...> [regenrx]
> <regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>> wrote:
>
> □
>
> *I don't see the need for two 20K pots, even if it's a dual pot.
> Just ground the bottom of the upper pot and get rid of the lower pot.*
> **
> *Leonard*
>
> ----- Original Message -----
> *From:* Rob roomberg@... [regenrx]
> <mailto:roomberg@...+[regenrx]>
> *To:* regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>
> *Sent:* Saturday, June 18, 2016 5:55 AM
> *Subject:* [regenrx] 716 regen and wire wrap 2X20K pots with
> NO 220K resistor
>
> Can any of our "non-beginners" here give me any instructions
> about this concern?
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> electronics dabbler.
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> See here:
> http://www.learnmorsecode.com/716/JA9MAT716C.jpg
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>
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> On 06/18/2016 07:24 AM, 'John O'Donnell' jod2005@...
> <mailto:jod2005@...> [regenrx] wrote:
>>
>> □
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>> Hi Rob,
>> I'm a bit concerned with what you have done with the 2 x 20k
>> pots. The way you have set them up the V+ could be shorted
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>> not to mention what it must be doing to the bias of the
>> second transistor. I think you should have kept the 220k
>> resistor in place. But then I could be wrong, I'm just a
>> beginner!
>> John
>>
>
>
>

26664. wire wrap square wire sources

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-18 20:03:10 UTC
From: Rob
Topic: 26452 Message: 26664

Thanks for the square wire lead Ken.
I did buy some
and
then poked around the net and found other square wires...used for crafts....
18,20, and 22 AWG... ordered some ....
we'll see whats good for circuits.

I have bought plain craft wire from Walmart.
Some have an enamel color coating.... some are bare wire.
I would like to get away from scraping a color coating for pins ... but
is seems to me that
scraping a color coating off a square wire could be a lot easier than
scraping a round wire.

This is all an experiment in craft materials for me to find out if we
can make something
with the kids.

On 06/18/2016 12:24 PM, Kenneth Ketner klaine@... [regenrx] wrote:
> You could get some old Timey Square copper bus wire, cut a half inch
> or so, mount, and wire wrap. Antique radio supply (www.tubesandmore)
> has it. Used in the twenties radio sets. It is about 1/16 inch square
> cross section. Other gauges might be available.
>
> Ken Ketner

26665. Re: Regen based upon the VCO part of an MC1648 VFO IC.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-19 17:11:05 UTC
From: dawmast@...
Topic: 26257 Message: 26665

Q4 in the MC1648 IC is an emitter follower stage for the ALC amp. Q5. Emitter followers often form parasitic Colpitts oscillations due to unwanted capacitive voltage dividers involved. Which measures are taken to avoid unwanted oscillations of stage Q4? The same goes for emitter follower stage T3 in the lowermost schematic below.

Schematic of the MC1648 VFO IC

[img]http://i.imgur.com/3dBpF99.jpg[/img]

Schematic of a sweep generator Source:[url]https://sites.google.com/site/linuxdigitallab/rf-homebrew-instrument/mw-hf-sweep-signal-source-on-going[/url]

[img]https://sites.google.com/site/linuxdigitallab/rf-homebrew-instrument/mw-hf-sweep-signal-source-on-going/2012-12-23%2015%3A59%3A15%E7%9A%84%E5%B1%8F%E5%B9%95%E6%88%AA%E5%9B%BE.png[/img]

26666. Adding a simple Q-multiplier to a crystal set

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-21 13:10:42 UTC
From: parkerp@...
Topic: 26666 Message: 26666

Built many regens but no Q-multipliers before.

My starting point was the first circuit at A crystal receiver with a Q-Multiplier. - TheRadioBoard Forums http://theradioboard.com/rb/viewtopic.php?t=6660

A crystal receiver with a Q-Multiplier. - TheRadioBoard Forums http://theradioboard.com/rb/viewtopic.php?t=6660 Re: A crystal receiver with a Q-Multiplier. Postby Pat Pending » Sat Dec 05, 2015 12:34 am I've added this regenerative "Q" muliplier to a "crystal" set.

View on theradioboard.com http://theradioboard.com/rb/viewtopic.php?t=6660
Preview by Yahoo

It worked first time but improvements were possible.

Here's what I did:

1. Tapped the BC548 emitter well down the coil (about 4 turns up from earth).
2. Reduced the 100pF coupling capacitor down to about 3.3 or 4.7 pF.
3. Connected the free end of the 3.3 or 4.7 pF to the top of the coil/variable capacitor junction

I have found the Q multiplier doesn't improve the volume of stronger stations. Neither does it greatly help cut out overload from strong stations. But it does improve selectivity somewhat and makes weak stations audible that previously were not. At night there are many weak carriers. My listening has been with 2000 ohm mangnetic headphones and it is possible that some of the weak carriers will be identifiable if an audio amp is added.

26667. Re: Adding a simple Q-multiplier to a crystal set

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-21 20:59:07 UTC
From: parkerp@...
Topic: 26666 Message: 26667

Quick update: An even lower capacitance was even better. The 4.7pF was replaced with about 50mm enamelled copper wire wound over the connection to the variable capacitor. This cuts the number of added parts to just 4 (BC548, 10k, 100k, 100n).

26668. wire wrap square wire home brew pins work

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-22 17:57:24 UTC
From: Rob
Topic: 26452 Message: 26668

Wire arrived today.
The antique bus wire is huge. Not a feasible replacement for
wire wrap pins but I can definitely see using the bus wire for
larger pin tasks. The tool would have to be modified with a much bigger
bit.

BUT

21 gauge wire worked with the home brew electric tool.
21 gauge wire definitely is a tiny bit too big for the standard wire
wrap tool
but the mission was not to use the expensive tools.

BEADSMITH CRAFTWIRE
21 Gauge NON-TARNISH
SQUARE ROSE GOLD

Noting that the color ROSE-GOLD is what makes it NON-TARNISH
and it scrapes off just like any enamel coated magnet wire
so if you really must wire wrap a project but you can not find
real wire wrap tools and wire and pins then this stuff really
could work for you.

http://www.learnmorsecode.com/716/21gaugeSQUAREroseGOLD.jpg
http://www.learnmorsecode.com/716/716.html

I'm thinking this wire could be pushed into a soft pine board
or drill pilot hold and glue them into the holes.
21 AWG is not a tight fit in VERO board.

I have 18 AWG square wire coming. We'll see what happens with the fatter
wire.

Either size..... this would definitely be just fine for kid projects
using complicated
circuits and print a baseboard guide circuit that gets glued to the
board before the pins
are set and then also use color wires.

On 06/18/2016 04:03 PM, Rob roomberg@... [regenrx] wrote:
>
> Thanks for the square wire lead Ken.
> I did buy some
> and
> then poked around the net and found other square wires...used for
> crafts....
> 18,20, and 22 AWG... ordered some ....

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> I have bought plain craft wire from Walmart.
> Some have an enamel color coating.... some are bare wire.
> I would like to get away from scraping a color coating for pins ...
> but is seems to me that
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>> has it. Used in the twenties radio sets. It is about 1/16 inch square
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>> Ken Ketner
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>
> --
>

26669. Submini tubes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-22 18:47:41 UTC
From: Leonard Meek
Topic: 26669 Message: 26669

Has anyone experimented with proximity fuze tubes? I used a couple in my Mk.19. They worked very well at first, but now aren't doing so well. The tubes were not designed to last very long, maybe 10 seconds or so. I breadboarded a few to see if I could develop some characteristic curves, and noticed that they degraded the longer I kept them on. Therefore, I don't think it's worth persuing the project any further. Now I'm working on some submini tubes that seem to be hearing aid tubes. They're triodes and the only markings on them are 433 and 447. They seem to have a greater mu than the proximity pentodes and have a higher frequency response, up to 10MHz or better. The proximity pentodes seemed to peak around 600KHz, maybe because of the breadboard setup. With a crystal the 433 and 447 readily go into oscillation, so I'm sure they'll work as regen detectors. The next step is to see if I can measure the mu and gm.

Leonard

26670. RE: [regenrx] Submini tubes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-23 00:04:30 UTC
From: Hubert Miller
Topic: 26669 Message: 26670

Leonard - your observations are very interesting. I thought the minimum non-gas tubes were rated at was 100 hours, such as the 5676 tube. I first learned about
the limited life hours rating recently in a military manual that described the tube purpose rather than detailed specs. I had known for some time that some gas
tubes, and i'm thinking of the RK-61 submini, had lifespan rated in hours. (This was a gas tube used in radio control ship and plane models of the 1950s, used in
a superregen circuit, usually on 27 MHz CB.) The texts on that tube say the larger the plate current, the shorter the life of the tube.
I wonder what exactly is going on with your V.T. fuze tubes.
I think they operated on around 300 MHz in the V.T. fuze weapon. I have a book on the V.T. fuze "The Deadly Magic", but it's packed away now.
-Hue Miller

-----Original Message-----
From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Wednesday, June 22, 2016 11:48 AM
Has anyone experimented with proximity fuze tubes? I used a couple in my Mk.19. They worked very well at first, but now aren't doing so well. The tubes were not designed to last very long, maybe 10 seconds or so. I breadboarded a few to see if I could develop some characteristic curves, and noticed that they degraded the longer I kept them on. Therefore, I don't think it's worth persuing the project any further. Now I'm working on some submini tubes that seem to be hearing aid tubes. They're triodes and the only markings on them are 433 and 447. They seem to have a greater mu than the proximity pentodes and have a higher frequency response, up to 10MHz or better. The proximity pentodes seemed to peak around 600KHz, maybe because of the breadboard setup. With a crystal the 433 and 447 readily go into oscillation, so I'm sure they'll work as regen detectors. The next step is to see if I can measure the mu and gm.

Leonard

"In the interest of Regenerating radio's lost art of Regeneration"

Yahoo Groups Links

26671. Re: [regenrx] Submini tubes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-23 01:28:00 UTC
From: Leonard Meek
Topic: 26669 Message: 26671

Hue, I have a copy of OP1480 on VT Fuzes but I can't find any data on life expectancy of the tubes or battery (energizer) voltages. My opinion is that the emission of the filament depletes rather quickly, since the tube is intended to last only for the time of flight of the prokectile. I used to work in Naval Ordnance and never thought to look up any data on the VT fuzes at the time.

Leonard

----- Original Message -----
From: "Hubert Miller kargo_cult@... [regenrx]" <regenrx@yahoogroups.com>
To: <regenrx@yahoogroups.com>
Sent: Wednesday, June 22, 2016 2:04 PM
Subject: RE: [regenrx] Submini tubes

> Leonard - your observations are very interesting. I thought the minimum
> non-gas tubes were rated at was 100 hours, such as the 5676 tube. I first
> learned about
> the limited life hours rating recently in a military manual that described
> the tube purpose rather than detailed specs. I had known for some time
> that
> some gas
> tubes, and i'm thinking of the RK-61 submini, had lifespan rated in hours.
> (
> This was a gas tube used in radio control ship and plane models of the
> 1950s, used in
> a superregen circuit, usually on 27 MHz CB.) The texts on that tube say
> the larger the plate current, the shorter the life of the tube.
> I wonder what exactly is going on with your V.T. fuze tubes.
> I think they operated on around 300 MHz in the V.T. fuze weapon. I have a
> book on the V.T. fuze "The Deadly Magic", but it's packed away now.
> -Hue Miller
>
> -----Original Message-----
> From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
> Sent: Wednesday, June 22, 2016 11:48 AM
> Has anyone experimented with proximity fuze tubes? I used a couple in my
> Mk.19. They worked very well at first, but now aren't doing so well. The
> tubes were not designed to last very long, maybe 10 seconds or so. I
> breadboarded a few to see if I could develop some characteristic curves,
> and
> noticed that they degraded the longer I kept them on. Therefore, I don't
> think it's worth persuing the project any further. Now I'm working on some
> submini tubes that seem to be hearing aid tubes. They're triodes and the
> only markings on them are 433 and 447. They seem to have a greater mu than
> the proximity pentodes and have a higher frequency response, up to 10MHz

> or
> better. The proximity pentodes seemed to peak around 600KHz, maybe because
> of the breadboard setup. With a crystal the 433 and 447 readily go into
> oscillation, so I'm sure they'll work as regen detectors. The next step is
> to see if I can measure the mu and gm.
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> Leonard
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> "In the interest of Regenerating radio's lost art of Regeneration"
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> Yahoo Groups Links
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26672. Re: [regenrx] Submini tubes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-23 02:18:35 UTC
From: Brian Ford
Topic: 26669 Message: 26672

blockquote, div.yahoo_quoted { margin-left: 0 !important; border-left:1px #715FFA solid !important; padding-left:1ex !important; background-color:white !important; } Very interesting reading?
Keith

Sent from Yahoo Mail for iPad

On Wednesday, June 22, 2016, 20:28, 'Leonard Meek' lemeek@... [regenrx] <regenrx@yahoogroups.com> wrote:

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-- #ygrp-mkp {border:1px solid #d8d8d8;font-family:Arial;margin:10px 0;padding:0
10px;}#ygrp-mkp hr {border:1px solid #d8d8d8;}#ygrp-mkp #hd
{color:#628c2a;font-size:85%;font-weight:700;line-height:122%;margin:10px 0;}#ygrp-mkp

#ads {margin-bottom:10px;}#ygrp-mkp .ad {padding:0 0;}#ygrp-mkp .ad p {margin:0;}#ygrp-mkp .ad a {color:#0000ff;text-decoration:none;}#ygrp-sponsor #ygrp-lc {font-family:Arial;}#ygrp-sponsor #ygrp-lc #hd {margin:10px 0px;font-weight:700;font-size:78%;line-height:122%;}#ygrp-sponsor #ygrp-lc .ad {margin-bottom:10px;padding:0 0;}#actions {font-family:Verdana;font-size:11px;padding:10px 0;}#activity {background-color:#e0ecee;float:left;font-family:Verdana;font-size:10px;padding:10px;}#activity span {font-weight:700;}#activity span:first-child {text-transform:uppercase;}#activity span a {color:#5085b6;text-decoration:none;}#activity span span {color:#ff7900;}#activity span .underline {text-decoration:underline;}.attach {clear:both;display:table;font-family:Arial;font-size:12px;padding:10px 0;width:400px;}.attach div a {text-decoration:none;}.attach img {border:none;padding-right:5px;}.attach label {display:block;margin-bottom:5px;}.attach label a {text-decoration:none;}blockquote {margin:0 0 0 4px;}.bold {font-family:Arial;font-size:13px;font-weight:700;}.bold a {text-decoration:none;}dd.last p a {font-family:Verdana;font-weight:700;}dd.last p span {margin-right:10px;font-family:Verdana;font-weight:700;}dd.last p span.yshortcuts {margin-right:0;}div.attach-table div div a {text-decoration:none;}div.attach-table {width:400px;}div.file-title a, div.file-title a:active, div.file-title a:hover, div.file-title a:visited {text-decoration:none;}div.photo-title a, div.photo-title a:active, div.photo-title a:hover, div.photo-title a:visited {text-decoration:none;}div#ygrp-mlmsg #ygrp-msg p a span.yshortcuts {font-family:Verdana;font-size:10px;font-weight:normal;}.green {color:#628c2a;}.MsoNormal {margin:0 0 0 0;}o {font-size:0;}#photos div {float:left;width:72px;}#photos div div {border:1px solid #666666;height:62px;overflow:hidden;width:62px;}#photos div label {color:#666666;font-size:10px;overflow:hidden;text-align:center;white-space:nowrap;width:64px;}#reco-category {font-size:77%;}#reco-desc {font-size:77%;}.replbq {margin:4px;}#ygrp-actbar div a:first-child {margin-right:2px;padding-right:5px;}#ygrp-mlmsg {font-size:13px;font-family:Arial, helvetica, clean, sans-serif;}#ygrp-mlmsg table {font-size:inherit;font:100%;}#ygrp-mlmsg select, input, textarea {font:99% Arial, Helvetica, clean, sans-serif;}#ygrp-mlmsg pre, code {font:115% monospace;}#ygrp-mlmsg * {line-height:1.22em;}#ygrp-mlmsg #logo {padding-bottom:10px;}#ygrp-msg p a {font-family:Verdana;}#ygrp-msg p#attach-count span {color:#1E66AE;font-weight:700;}#ygrp-reco #reco-head {color:#ff7900;font-weight:700;}#ygrp-reco {margin-bottom:20px;padding:0px;}#ygrp-sponsor #ov li a {font-size:130%;text-decoration:none;}#ygrp-sponsor #ov li {font-size:77%;list-style-type:square;padding:6px 0;}#ygrp-sponsor #ov ul {margin:0;padding:0 0 0 8px;}#ygrp-text {font-family:Georgia;}#ygrp-text p {margin:0 0 1em 0;}#ygrp-text tt {font-size:120%;}#ygrp-vital ul li:last-child {border-right:none !important;}

26673. Re: wire wrap square wire home brew pins work

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-23 23:04:55 UTC
From: Kenneth Ketner
Topic: 26452 Message: 26673

Rob, A Google for square copper wire produced so hits in gauges from 10 to 24. For example....
https://www.google.com/aclk?sa=L&ai=Cn99syWhsV9WNBIGm-gPNjrCgDon1u7AH2bbRvMcBybHunrYFCAkQDSDDkeQeKBRgyZ79jOSksBTIAQeqBCpP0H8kbvVjuRkKI5QPS3AwZ1qGvKopJT_8dTKOBogCMMxNH7u9j_b0ITbABQWgBibYBgSAB9uAjhWQBwOoB6a-G9gHAeASiKzilaT_-afsAQ&sig=AOD64_3HVKWZ7r8qkNhkjacQhs_ON_f3ig&adurl=http://rover.ebay.com/rover/1/711-117182-37290-0/2%3Fmtid%3D1588%26kwid%3D1%26crlp%3D53601919689_324272%26itemid%3D281608645956%26targetid%3D186358929609%26rpc%3D0.24%26rpc_upld_id%3D72320%26device%3Dt%26mpre%3Dhttp%253A%252F%252Fwww.ebay.com%252Fulk%252Fitm%252Flike%252F281608645956%253Flpid%253D82%2526chn%253Dps%26adtype%3Dpla%26googleloc%3D9028554%26poi%3D%26campaignid%3D239125209%26adgroupid%3D14978428809%26rlsatarget%3Dpla-186358929609&ctype=5&clui=35&q=&ved=0ahUKEwignJWPn7_NAhXCdSYKHbJTAuYQpysIaw&ei=yWhsV-CTAcLrmQGyp4mwDg

Brass square is out there too.

Ken Ketner
KA5ELD
PO Box 65135
Lubbock, TX 79464-5135
Sent from my iPad

26674. wire wrap square 18 gauge square craft wire fits vero board

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-23 23:23:12 UTC
From: Rob
Topic: 26452 Message: 26674

www.beadalon.com brand
GERMAN STYLE WIRE
18 GAUGE SQUARE
SILVER PLATED

comes in 1.25 meter length for $7.50 which makes 125? pins .....
perhaps costing 6 cents per pin.

It has no coating and is conductive so no scraping any color coatings.

It fits very snugly pressing into the holes in VERO board.

If I had to make pins.... this is the stuff I would use.

I also got some 20 gauge. The 20 gauge is thinner and slips freely
through VERO board holes.

Both 18 and 20 are too fat for standard tools but wrap nicely with the
ink cartridge tool.

I can also see using this wire as coil mounting pins.

On 06/22/2016 01:57 PM, Rob roomberg@... [regenrx] wrote:
>
> Wire arrived today.
> The antique bus wire is huge. Not a feasible replacement for
> wire wrap pins but I can definitely see using the bus wire for
> larger pin tasks. The tool would have to be modified with a much bigger
> bit.
>
> BUT
>
> 21 gauge wire worked with the home brew electric tool.
> 21 gauge wire definitely is a tiny bit too big for the standard wire
> wrap tool
> but the mission was not to use the expensive tools.
>
>
> BEADSMITH CRAFTWIRE
> 21 Gauge NON-TARNISH
> SQUARE ROSE GOLD
>
> Noting that the color ROSE-GOLD is what makes it NON-TARNISH
> and it scrapes off just like any enamel coated magnet wire
> so if you really must wire wrap a project but you can not find
> real wire wrap tools and wire and pins then this stuff really
> could work for you.

>
> http://www.learnmorsecode.com/716/21gaugeSQUAREroseGOLD.jpg
> http://www.learnmorsecode.com/716/716.html
>
> I'm thinking this wire could be pushed into a soft pine board
> or drill pilot hold and glue them into the holes.
> 21 AWG is not a tight fit in VERO board.
>
> I have 18 AWG square wire coming. We'll see what happens with the
> fatter wire.
>
> Either size..... this would definitely be just fine for kid projects
> using complicated
> circuits and print a baseboard guide circuit that gets glued to the
> board before the pins
> are set and then also use color wires.
>
>
>
> On 06/18/2016 04:03 PM, Rob roomberg@... [regenrx] wrote:
>>
>> Thanks for the square wire lead Ken.
>> I did buy some
>> and
>> then poked around the net and found other square wires...used for
>> crafts....
>> 18,20, and 22 AWG... ordered some ....
>> we'll see whats good for circuits.
>>
>> I have bought plain craft wire from Walmart.
>> Some have an enamel color coating.... some are bare wire.
>> I would like to get away from scraping a color coating for pins ...
>> but is seems to me that
>> scraping a color coating off a square wire could be a lot easier than
>> scraping a round wire.
>>
>> This is all an experiment in craft materials for me to find out if we
>> can make something
>> with the kids.
>>
>>
>>
>>
>> On 06/18/2016 12:24 PM, Kenneth Ketner klaine@... [regenrx] wrote:
>>> You could get some old Timey Square copper bus wire, cut a half inch
>>> or so, mount, and wire wrap. Antique radio supply (www.tubesandmore)
>>> has it. Used in the twenties radio sets. It is about 1/16 inch
>>> square cross section. Other gauges might be available.
>>>
>>> Ken Ketner

>>
>> ---
>>
>
>

26675. Re: [regenrx] Re: wire wrap square wire home brew pins work

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-23 23:36:05 UTC
From: Rob
Topic: 26452 Message: 26675

WOW
COOL!
THANKS KEN!

Your EBAY link shows 18 gauge sold in quantity of 50 feet costs $27.18
which would make 1,524 ten millimeter pins.... at a cost of 1.7 cents each.

On 06/23/2016 07:04 PM, Kenneth Ketner klaine@... [regenrx] wrote:
> Rob, A Google for square copper wire produced so hits in gauges from
> 10 to 24. For example....
> https://www.google.com/aclk?sa=L&ai=Cn99syWhsV9WNBIGm-gPNjrCgDon1u7AH2bbRvMcBybHunrYFCAkQDSDDkeQeKBRgyZ79jOSksBTIAQeqBCpP0H8kbvVjuRkKI5QPS3AwZ1qGvKopJT_8dTKOBogCMMxNH7u9j_b0ITbABQWgBibYBgSAB9uAjhWQBwOoB6a-G9gHAeASiKzilaT_-afsAQ&sig=AOD64_3HVKWZ7r8qkNhkjacQhs_ON_f3ig&adurl=http://rover.ebay.com/rover/1/711-117182-37290-0/2%3Fmtid%3D1588%26kwid%3D1%26crlp%3D53601919689_324272%26itemid%3D281608645956%26targetid%3D186358929609%26rpc%3D0.24%26rpc_upld_id%3D72320%26device%3Dt%26mpre%3Dhttp%253A%252F%252Fwww.ebay.com%252Fulk%252Fitm%252Flike%252F281608645956%253Flpid%253D82%2526chn%253Dps%26adtype%3Dpla%26googleloc%3D9028554%26poi%3D%26campaignid%3D239125209%26adgroupid%3D14978428809%26rlsatarget%3Dpla-186358929609&ctype=5&clui=35&q=&ved=0ahUKEwignJWPn7_NAhXCdSYKHbJTAuYQpysIaw&ei=yWhsV-CTAcLrmQGyp4mwDg
> <https://www.google.com/aclk?sa=L&ai=Cn99syWhsV9WNBIGm-gPNjrCgDon1u7AH2bbRvMcBybHunrYFCAkQDSDDkeQeKBRgyZ79jOSksBTIAQeqBCpP0H8kbvVjuRkKI5QPS3AwZ1qGvKopJT_8dTKOBogCMMxNH7u9j_b0ITbABQWgBibYBgSAB9uAjhWQBwOoB6a-G9gHAeASiKzilaT_-afsAQ&sig=AOD64_3HVKWZ7r8qkNhkjacQhs_ON_f3ig&adurl=http://rover.ebay.com/rover/1/711-117182-37290-0/2%3Fmtid%3D1588%26kwid%3D1%26crlp%3D53601919689_324272%26itemid%3D281608645956%26targetid%3D186358929609%26rpc%3D0.24%26rpc_upld_id%3D72320%26device%3Dt%26mpre%3Dhttp%253A%252F%252Fwww.ebay.com%252Fulk%252Fitm%252Flike%252F281608645956%253Flpid%253D82%2526chn%253Dps%26adtype%3Dpla%26googleloc%3D9028554%26poi%3D%26campaignid%3D239125209%26adgroupid%3D14978428809%26rlsatarget%3Dpla-186358929609&ctype=5&clui=35&q=&ved=0ahUKEwignJWPn7_NAhXCdSYKHbJTAuYQpysIaw&ei=yWhsV-CTAcLrmQGyp4mwDg%0A%20>
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> Sent from my iPad
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26676. Re: Adding a simple Q-multiplier to a crystal set

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-24 11:44:33 UTC
From: parkerp@...
Topic: 26666 Message: 26676

Video demo at Q multiplier improves crystal set reception
https://www.youtube.com/watch?v=4ix5gNrJy2E

26677. Re: [regenrx] Re: Adding a simple Q-multiplier to a crystal set

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-24 12:47:57 UTC
From: Brian Ford
Topic: 26666 Message: 26677

blockquote, div.yahoo_quoted { margin-left: 0 !important; border-left:1px #715FFA solid !important; padding-left:1ex !important; background-color:white !important; } Interesting, I think I missed the original message.
Keith

Sent from Yahoo Mail for iPad

On Friday, June 24, 2016, 06:44, parkerp@... [regenrx] <regenrx@yahoogroups.com> wrote:

Video demo at Q multiplier improves crystal set reception
-- #ygrp-mkp {border:1px solid #d8d8d8;font-family:Arial;margin:10px 0;padding:0 10px;}#ygrp-mkp hr {border:1px solid #d8d8d8;}#ygrp-mkp #hd {color:#628c2a;font-size:85%;font-weight:700;line-height:122%;margin:10px 0;}#ygrp-mkp #ads {margin-bottom:10px;}#ygrp-mkp .ad {padding:0 0;}#ygrp-mkp .ad p {margin:0;}#ygrp-mkp .ad a {color:#0000ff;text-decoration:none;}#ygrp-sponsor #ygrp-lc {font-family:Arial;}#ygrp-sponsor #ygrp-lc #hd {margin:10px 0px;font-weight:700;font-size:78%;line-height:122%;}#ygrp-sponsor #ygrp-lc .ad {margin-bottom:10px;padding:0 0;}#actions {font-family:Verdana;font-size:11px;padding:10px 0;}#activity {background-color:#e0ecee;float:left;font-family:Verdana;font-size:10px;padding:10px;}#activity span {font-weight:700;}#activity span:first-child {text-transform:uppercase;}#activity span a {color:#5085b6;text-decoration:none;}#activity span span {color:#ff7900;}#activity span .underline {text-decoration:underline;}.attach {clear:both;display:table;font-family:Arial;font-size:12px;padding:10px 0;width:400px;}.attach div a {text-decoration:none;}.attach img {border:none;padding-right:5px;}.attach label {display:block;margin-bottom:5px;}.attach label a {text-decoration:none;}blockquote {margin:0 0 0 4px;}.bold {font-family:Arial;font-size:13px;font-weight:700;}.bold a {text-decoration:none;}dd.last p a {font-family:Verdana;font-weight:700;}dd.last p span {margin-right:10px;font-family:Verdana;font-weight:700;}dd.last p span.yshortcuts {margin-right:0;}div.attach-table div div a {text-decoration:none;}div.attach-table {width:400px;}div.file-title a, div.file-title a:active, div.file-title a:hover, div.file-title a:visited {text-decoration:none;}div.photo-title a, div.photo-title a:active, div.photo-title a:hover, div.photo-title a:visited {text-decoration:none;}div#ygrp-mlmsg #ygrp-msg p a span.yshortcuts {font-family:Verdana;font-size:10px;font-weight:normal;}.green {color:#628c2a;}.MsoNormal {margin:0 0 0 0;}o {font-size:0;}#photos div {float:left;width:72px;}#photos div div {border:1px solid #666666;height:62px;overflow:hidden;width:62px;}#photos div label {color:#666666;font-size:10px;overflow:hidden;text-align:center;white-space:nowrap;width:64px;}#reco-category {font-size:77%;}#reco-desc {font-size:77%;}.replbq {margin:4px;}#ygrp-actbar div a:first-child {margin-right:2px;padding-right:5px;}#ygrp-mlmsg {font-size:13px;font-family:Arial, helvetica, clean, sans-serif;}#ygrp-mlmsg table {font-size:inherit;font:100%;}#ygrp-mlmsg select, input, textarea {font:99% Arial, Helvetica, clean, sans-serif;}#ygrp-mlmsg pre, code {font:115% monospace;}#ygrp-mlmsg * {line-height:1.22em;}#ygrp-mlmsg #logo {padding-bottom:10px;}#ygrp-msg p a {font-family:Verdana;}#ygrp-msg p#attach-count span {color:#1E66AE;font-weight:700;}#ygrp-reco #reco-head

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26678. RE: [regenrx] Re: Adding a simple Q-multiplier to a crystal set

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-24 13:10:20 UTC
From: Mike Feher
Topic: 26666 Message: 26678

I do not get it. A Q multiplier works by regeneration, essentially an oscillator. That is the same as a regen by itself. So, why have a crystal set in front of it? Maybe just an extra tuned circuit? Regards – Mike

Mike B. Feher, N4FS

89 Arnold Blvd.

Howell, NJ, 07731

732-886-5960

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Friday, June 24, 2016 8:48 AM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Re: Adding a simple Q-multiplier to a crystal set

Interesting, I think I missed the original message.

Keith

Sent from Yahoo Mail for iPad <https://yho.com/footer0>

On Friday, June 24, 2016, 06:44, parkerp@... [regenrx] <regenrx@yahoogroups.com> wrote:

Video demo at Q multiplier improves crystal set reception
<https://www.youtube.com/watch?v=4ix5gNrJy2E>

26679. Re: [regenrx] Transceiver build with regen completed [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-24 13:56:43 UTC
From: dubtub88@...
Topic: 26581 Message: 26679

I have always wanted to build a WESKIT just to say I did it. I figured I would try to make a cabinet just to keep it somewhat authentic.

MY SCHEMATIC is very similar but is a phone modulated version. I never made it passed the "start" hurdle since there are no"Walkie-Talkie transformers to be found. I considered on trying to wind my own but that idea got pushed aside quickly. It is an interstage transformer 3:1 BUT with a carbon mike winding added to it. One or two transformer companies produced it. I have part numbers but you would need to find one in a very old junk box.

I am happy to hear that this was areal produced kit and not someone's idea just running amock.

Any comments would be greatly appreciated on the modulated version.

TIM

26680. RE: [regenrx] Transceiver build with regen completed

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-24 14:13:15 UTC
From: Hubert Miller
Topic: 26581 Message: 26680

Who produced the ‘real kit’ ? I missed that email. WESKIT didn’t produce any modulated transmitter and as a very small operation, they never commissioned

any special part like a dual-winding audio transformer. Their kits didn’t use an audio transformer at all, because that would have escalated the price out of the

toy class.

-Hue

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Friday, June 24, 2016 6:57 AM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Transceiver build with regen completed

I have always wanted to build a WESKIT just to say I did it. I figured I would try to make a cabinet just to keep it somewhat authentic.

MY SCHEMATIC is very similar but is a phone modulated version. I never made it passed the "start" hurdle since there are no"Walkie-Talkie transformers to be found. I considered on trying to wind my own but that idea got pushed aside quickly. It is an interstage transformer 3:1 BUT with a carbon mike winding added to it. One or two transformer companies produced it. I have part numbers but you would need to find one in a very old junk box.

I am happy to hear that this was areal produced kit and not someone's idea just running amock.

Any comments would be greatly appreciated on the modulated version.

TIM

26681. Re: [regenrx] Re: Adding a simple Q-multiplier to a crystal set

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-24 17:23:19 UTC
From: Cecil Bayona
Topic: 26666 Message: 26681

It's an incremental improvement to a crystal radio, that can be turned off so you have the original crystal radio still functioning. As a teenager I remember buying surplus gear such as the ARC-5 series of radios, and once working one would proceed to add improvements on at a time to end up with a much better radio, I was a good way to learn how radio circuits work and how to make them better.

On 6/24/2016 8:10 AM, 'Mike Feher' n4fs@eozinc.com [regenrx] wrote:
>
> I do not get it. A Q multiplier works by regeneration, essentially an
> oscillator. That is the same as a regen by itself. So, why have a
> crystal set in front of it? Maybe just an extra tuned circuit? Regards
> – Mike
>
> Mike B. Feher, N4FS
>
> 89 Arnold Blvd.
>
> Howell, NJ, 07731
>
> 732-886-5960
>
> *From:*regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
> *Sent:* Friday, June 24, 2016 8:48 AM
> *To:* regenrx@yahoogroups.com
> *Subject:* Re: [regenrx] Re: Adding a simple Q-multiplier to a crystal set
>
> Interesting, I think I missed the original message.
>
> Keith
>
>
> Sent from Yahoo Mail for iPad <https://yho.com/footer0>
>
> On Friday, June 24, 2016, 06:44, parkerp@...
> <mailto:parkerp@...> [regenrx] <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>> wrote:
>
> Video demo at Q multiplier improves crystal set reception
> <https://www.youtube.com/watch?v=4ix5gNrJy2E>
>
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> --
> Posted by: "Mike Feher" <n4fs@...>
> --

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Cecil - k5nwa
http://thepartsplace.k5nwa.com/

26682. RE: [regenrx] Re: Adding a simple Q-multiplier to a crystal set

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-24 17:30:39 UTC
From: Mike Feher
Topic: 26666 Message: 26682

I agree that all experimentation can be a learning experience that I do not intend to impede. My comment was only that, hey, you have a crystal set as a receiver, and, you have a Q multiplier that is also a receiver. Only difference id that when used as a real Q multiplier it was tuned to the IF of the companion receiver. In this use, the tuning is done by the crystal set circuit and the feedback for regeneration is by the added circuitry. It is no longer a crystal set, but a regen anyway. Regards – Mike

Mike B. Feher, N4FS

89 Arnold Blvd.

Howell, NJ, 07731

732-886-5960

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Friday, June 24, 2016 1:23 PM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Re: Adding a simple Q-multiplier to a crystal set

It's an incremental improvement to a crystal radio, that can be turned off so you have the original crystal radio still functioning. As a teenager I remember buying surplus gear such as the ARC-5 series of radios, and once working one would proceed to add improvements on at a time to end up with a much better radio, I was a good way to learn how radio circuits work and how to make them better.

On 6/24/2016 8:10 AM, 'Mike Feher' n4fs@... [regenrx] wrote:

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Mike B. Feher, N4FS

89 Arnold Blvd.

Howell, NJ, 07731

732-886-5960

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Friday, June 24, 2016 8:48 AM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Re: Adding a simple Q-multiplier to a crystal set

Interesting, I think I missed the original message.

Keith

Sent from Yahoo Mail for iPad <https://yho.com/footer0>

On Friday, June 24, 2016, 06:44, parkerp@... [regenrx] <regenrx@yahoogroups.com> wrote:

Video demo at Q multiplier improves crystal set reception
<https://www.youtube.com/watch?v=4ix5gNrJy2E>

Posted by: "Mike Feher" <mailto:n4fs@...> <n4fs@...>

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Cecil - k5nwa
http://thepartsplace.k5nwa.com/

26683. Re: [regenrx] Re: Adding a simple Q-multiplier to a crystal set

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-24 17:45:22 UTC
From: Cecil Bayona
Topic: 26666 Message: 26683

But a q-multiplier is not a receiver, it doesn't not detect signals, it also has no tuning circuits of it's own, but uses the radios already existing tuning circuits It's a very special case of regeneration to add to existing radios but not radically change them. When I worked on the ARC-5 radios I added a Q Multiplier to improve the sensitivity and the selectivity, but it required no changes to the original circuit of the radio, it still used it's original detector. Subtle differences but enough that the q-multiplier and a regenerative detector are not the same thing.

Regenerative detectors are still used often as shown on this list, but q-multipliers are nor often used at all so for him it was something novel to try out. A Q-multiplier can also provide a notch in the frequency response to kill an undesired signal, something that a regenerative detector does not provide.

On 6/24/2016 12:30 PM, 'Mike Feher' n4fs@... [regenrx] wrote:
>
> I agree that all experimentation can be a learning experience that I
> do not intend to impede. My comment was only that, hey, you have a
> crystal set as a receiver, and, you have a Q multiplier that is also a
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>
> Mike B. Feher, N4FS
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> 89 Arnold Blvd.
>
> Howell, NJ, 07731
>
> 732-886-5960
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> *From:*regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
> *Sent:* Friday, June 24, 2016 1:23 PM
> *To:* regenrx@yahoogroups.com
> *Subject:* Re: [regenrx] Re: Adding a simple Q-multiplier to a crystal set
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> off so you have the original crystal radio still functioning. As a
> teenager I remember buying surplus gear such as the ARC-5 series of
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>
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> <mailto:n4fs@...> [regenrx] wrote:
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> an oscillator. That is the same as a regen by itself. So, why have
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> Posted by: "Mike Feher" <n4fs@...> <mailto:n4fs@...>
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> Cecil - k5nwa
> http://thepartsplace.k5nwa.com/
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> ---
> Posted by: "Mike Feher" <n4fs@...>
> ---
> Reply via web post
> <https://groups.yahoo.com/neo/groups/regenrx/conversations/messages/26682;_ylc=X3oDMTJyc
WVlamFyBF9TAzk3MzU5NzE0BGdycElkAzEzOTk2OTA3BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAMyNjY4MgRzZWM
DZnRyBHNsawNycGx5BHN0aW1lAzE0NjY3ODk0NTI-?act=reply&messageNum=26682>
> • Reply to sender
> <mailto:n4fs@...?subject=RE%3A%20%5Bregenrx%5D%20Re%3A%20Adding%20a%20simple%20Q-multipl
ier%20to%20a%20crystal%20set>
> • Reply to group
> <mailto:regenrx@yahoogroups.com?subject=RE%3A%20%5Bregenrx%5D%20Re%3A%20Adding%20a%20sim
ple%20Q-multiplier%20to%20a%20crystal%20set>
> • Start a New Topic
> <https://groups.yahoo.com/neo/groups/regenrx/conversations/newtopic;_ylc=X3oDMTJmYjRqZzJ
nBF9TAzk3MzU5NzE0BGdycElkAzEzOTk2OTA3BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNudHBjBHN0a
W1lAzE0NjY3ODk0NTI->
> • Messages in this topic
> <https://groups.yahoo.com/neo/groups/regenrx/conversations/topics/26666;_ylc=X3oDMTM3cHE
wbjZrBF9TAzk3MzU5NzE0BGdycElkAzEzOTk2OTA3BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAMyNjY4MgRzZWMDZ
nRyBHNsawN2dHBjBHN0aW1lAzE0NjY3ODk0NTIEdHBjSWQDMjY2NjY->
> (7)
>
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>

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Cecil - k5nwa
http://thepartsplace.k5nwa.com/

26684. RE: [regenrx] Re: Adding a simple Q-multiplier to a crystal set

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-24 18:23:34 UTC
From: Mike Feher
Topic: 26666 Message: 26684

Cannot make you believe that you do not want to. Have Fun – Mike

Mike B. Feher, N4FS

89 Arnold Blvd.

Howell, NJ, 07731

732-886-5960

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Friday, June 24, 2016 1:45 PM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Re: Adding a simple Q-multiplier to a crystal set

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89 Arnold Blvd.

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Sent: Friday, June 24, 2016 1:23 PM
To: regenrx@yahoogroups.com

Subject: Re: [regenrx] Re: Adding a simple Q-multiplier to a crystal set

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From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Friday, June 24, 2016 8:48 AM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Re: Adding a simple Q-multiplier to a crystal set

Interesting, I think I missed the original message.

Keith

Sent from Yahoo Mail for iPad <https://yho.com/footer0>

On Friday, June 24, 2016, 06:44, parkerp@... [regenrx] <regenrx@yahoogroups.com> wrote:

Video demo at Q multiplier improves crystal set reception
<https://www.youtube.com/watch?v=4ix5gNrJy2E>

Posted by: "Mike Feher" <mailto:n4fs@...> <n4fs@eozinc.com>

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Cecil - k5nwa
http://thepartsplace.k5nwa.com/

Posted by: "Mike Feher" <mailto:n4fs@...> <n4fs@...>

<https://groups.yahoo.com/neo/groups/regenrx/conversations/messages/26682;_ylc=X3oDMTJycWVlamFyBF9TAzk3MzU5NzE0BGdycElkAzEzOTk2OTA3BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAMyNjY4MgRzZWMDZ

nRyBHNsawNycGx5BHN0aW1lAzE0NjY3ODk0NTI-?act=reply&messageNum=26682> Reply via web post

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<mailto:n4fs@...?subject=RE%3A%20%5Bregenrx%5D%20Re%3A%20Adding%20a%20simple%20Q-multiplier%20to%20a%20crystal%20set> Reply to sender

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<mailto:regenrx@yahoogroups.com?subject=RE%3A%20%5Bregenrx%5D%20Re%3A%20Adding%20a%20simple%20Q-multiplier%20to%20a%20crystal%20set> Reply to group

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<https://groups.yahoo.com/neo/groups/regenrx/conversations/newtopic;_ylc=X3oDMTJmYjRqZzJnBF9TAzk3MzU5NzE0BGdycElkAzEzOTk2OTA3BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNudHBjBHN0aW1lAzE0NjY3ODk0NTI-> Start a New Topic

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<https://groups.yahoo.com/neo/groups/regenrx/conversations/topics/26666;_ylc=X3oDMTM3cHEwbjZrBF9TAzk3MzU5NzE0BGdycElkAzEzOTk2OTA3BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAMyNjY4MgRzZWMDZnRyBHNsawN2dHBjBHN0aW1lAzE0NjY3ODk0NTIEdHBjSWQDMjY2NjY-> Messages in this topic (7)

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Cecil - k5nwa
http://thepartsplace.k5nwa.com/

26685. OT: "The Hallicrafters Hour" radio show posted on my Box site.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-25 04:28:43 UTC
From: Phil
Topic: 26685 Message: 26685

Hi All,

I just put a copy of the
"Halicrafters_Hour_450402_Guest_-_Hildegarde.mp3" up on my box site for
the enjoyment of anyone who may be interested.

This show from 1945 features the Hallicrafters line of radio equipment
(no surprise there) and appears to basically be an ad for their radios,
marketing to the expected post-war military crowd.

Some of you may recognize the callsign W9WZE, Halligan's own callsign
(the father of Hallicrafters).

Yes, I just noticed that Hallicrafters is misspelled in the file name,
but I didn't notice it until after I'd uploaded the file. I didn't name
the file, it's been in my OTR collection for years, I have over 100,000
old radio shows.

The link. Please download only if you're really interested as I'm
posting to several groups and expect the downloaded bandwidth will
exceed my monthly allowed "Box" bandwidth. Thank you.

https://app.box.com/s/et5qkpo37heutcv5490upalkxqjisuj1

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73 From "The Beaconeer's Lair"
Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)

HF/LF RADIOS:
Grundigs: S-350 (~2006), G6 (2011) & S450DLX (2014).
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
Icom: IC-735 Transceiver (~1990).
Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
Icom: IC-7200 Transceiver (~2015).
R-Shack: DX-380 digital portable (~1990).
SDR: Softrock Ensemble II LF (built from a kit 2015).
Zenith: Royal-7000 Transoceanic Portable (~1968).

ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 4 Port Multicoupler, Feeds Antenna to 4 RX's.
HOMEBREW 8 Hz Audio Filter.
Timewave DSP-599zx Audio Filter.
Behringer 1202fx Audio Mixer (for mixing/routing audio).

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.

37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

26686. Which way does this capacitor go

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-25 08:55:22 UTC
From: Rob
Topic: 26666 Message: 26686

I'm building an audio amplifier for the 7.16 regen circuit.

I found a circuit on the web that uses an MPF102 pre-amp and a TDA7052 amplifier chip:

I put it here to share it:
http://www.learnmorsecode.com/amp/1w_Punch_amp_schematic_MPF102andTDA7052.jpg

The circuit says C1 is 1u
which I assume is 1uF
an does not show a + symbol or curve so I would think that capacitor is not a polarized electrolytic.
So what IS it?
I have no 1uF capacitors here that are not polarized electrolytic so I'm sort of stumped.
Can I use my electrolytic 1uF cap or must this C1 NOT be an electrolytic?

Which way is the correct way to point a 1uF electrolytic cap?
I found multiple amplifier schematics on the web that use this TDA7052 chip that show that capacitor as 1uF and 2.2uF and points with the + toward the TDA7052 input pin
and another schematic with the + pointing away from the input pin.

26687. Re: Transceiver build with regen completed

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-25 12:40:28 UTC
From: Tim Haake
Topic: 26581 Message: 26687

Well I am not going to get into a pissing contest over the Weskit but I DO HAVE THE BUILDING DOCUMENTATION complete with box and construction notes and if you would like I will produce the part numbers for the "walkie talkie" transformer if you like that you say never existed. I have PN's from two different manufacturers. I suppose there is a ghost left from the old WESKIT days lurking on the internet making up all this phony docs and manufacturer specs that I have in my hands??
TIM

26688. Re: [regenrx] Which way does this capacitor go

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-25 13:53:40 UTC
From: Brian Ford
Topic: 26666 Message: 26688

blockquote, div.yahoo_quoted { margin-left: 0 !important; border-left:1px #715FFA solid !important; padding-left:1ex !important; background-color:white !important; } If you do not have the standard non electrolic cap, and it is 1u. You could use the gimmick capicitor. Two wires twisted together. It would reduce your parts count.
Keith.
I have not had coffee yet, please excuse any spelling faults.

Sent from Yahoo Mail for iPad

On Saturday, June 25, 2016, 03:55, Rob roomberg@... [regenrx] <regenrx@yahoogroups.com> wrote:

I'm building an audio amplifier for the 7.16 regen circuit.

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http://www.learnmorsecode.com/amp/1w_Punch_amp_schematic_MPF102andTDA7052.jpg

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and another schematic with the + pointing away from the input pin.

-- #ygrp-mkp {border:1px solid #d8d8d8;font-family:Arial;margin:10px 0;padding:0 10px;}#ygrp-mkp hr {border:1px solid #d8d8d8;}#ygrp-mkp #hd {color:#628c2a;font-size:85%;font-weight:700;line-height:122%;margin:10px 0;}#ygrp-mkp #ads {margin-bottom:10px;}#ygrp-mkp .ad {padding:0 0;}#ygrp-mkp .ad p {margin:0;}#ygrp-mkp .ad a {color:#0000ff;text-decoration:none;}#ygrp-sponsor #ygrp-lc {font-family:Arial;}#ygrp-sponsor #ygrp-lc #hd {margin:10px 0px;font-weight:700;font-size:78%;line-height:122%;}#ygrp-sponsor #ygrp-lc .ad {margin-bottom:10px;padding:0 0;}#actions {font-family:Verdana;font-size:11px;padding:10px 0;}#activity {background-color:#e0ecee;float:left;font-family:Verdana;font-size:10px;padding:10px;}#activity span {font-weight:700;}#activity span:first-child {text-transform:uppercase;}#activity span a {color:#5085b6;text-decoration:none;}#activity span span {color:#ff7900;}#activity span .underline {text-decoration:underline;}.attach

{clear:both;display:table;font-family:Arial;font-size:12px;padding:10px 0;width:400px;}.attach div a {text-decoration:none;}.attach img {border:none;padding-right:5px;}.attach label {display:block;margin-bottom:5px;}.attach label a {text-decoration:none;}blockquote {margin:0 0 0 4px;}.bold {font-family:Arial;font-size:13px;font-weight:700;}.bold a {text-decoration:none;}dd.last p a {font-family:Verdana;font-weight:700;}dd.last p span {margin-right:10px;font-family:Verdana;font-weight:700;}dd.last p span.yshortcuts {margin-right:0;}div.attach-table div div a {text-decoration:none;}div.attach-table {width:400px;}div.file-title a, div.file-title a:active, div.file-title a:hover, div.file-title a:visited {text-decoration:none;}div.photo-title a, div.photo-title a:active, div.photo-title a:hover, div.photo-title a:visited {text-decoration:none;}div#ygrp-mlmsg #ygrp-msg p a span.yshortcuts {font-family:Verdana;font-size:10px;font-weight:normal;}.green {color:#628c2a;}.MsoNormal {margin:0 0 0 0;}o {font-size:0;}#photos div {float:left;width:72px;}#photos div div {border:1px solid #666666;height:62px;overflow:hidden;width:62px;}#photos div label {color:#666666;font-size:10px;overflow:hidden;text-align:center;white-space:nowrap;width:64px;}#reco-category {font-size:77%;}#reco-desc {font-size:77%;}.replbq {margin:4px;}#ygrp-actbar div a:first-child {margin-right:2px;padding-right:5px;}#ygrp-mlmsg {font-size:13px;font-family:Arial, helvetica, clean, sans-serif;}#ygrp-mlmsg table {font-size:inherit;font:100%;}#ygrp-mlmsg select, input, textarea {font:99% Arial, Helvetica, clean, sans-serif;}#ygrp-mlmsg pre, code {font:115% monospace;}#ygrp-mlmsg * {line-height:1.22em;}#ygrp-mlmsg #logo {padding-bottom:10px;}#ygrp-msg p a {font-family:Verdana;}#ygrp-msg p#attach-count span {color:#1E66AE;font-weight:700;}#ygrp-reco #reco-head {color:#ff7900;font-weight:700;}#ygrp-reco {margin-bottom:20px;padding:0px;}#ygrp-sponsor #ov li a {font-size:130%;text-decoration:none;}#ygrp-sponsor #ov li {font-size:77%;list-style-type:square;padding:6px 0;}#ygrp-sponsor #ov ul {margin:0;padding:0 0 0 8px;}#ygrp-text {font-family:Georgia;}#ygrp-text p {margin:0 0 1em 0;}#ygrp-text tt {font-size:120%;}#ygrp-vital ul li:last-child {border-right:none !important;}

26689. Re: [regenrx] Which way does this capacitor go

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-25 16:33:56 UTC
From: Jim Pruitt
Topic: 26666 Message: 26689

I seriously doubt that you can get 1 microfarad of capacity from a gimmick capacitor. You might get a few picofarads.

It was asked if the cap is electrolytic. No, it is a monolithic or paper film and they do make monolithic and paper film caps up to a few microfarads. You can also take 2 electrolytic capacitors of 1mf value and wire them bucking (negative to negative or positive to positive) which makes a non polarized capacitor.

Jim

On Sat, Jun 25, 2016 at 6:53 AM, Brian Ford kf4tap@... [regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> If you do not have the standard non electrolic cap, and it is 1u. You
> could use the gimmick capicitor. Two wires twisted together. It would
> reduce your parts count.
>
> Keith.
>
> I have not had coffee yet, please excuse any spelling faults.
>
>
> Sent from Yahoo Mail for iPad <https://yho.com/footer0>
>
> On Saturday, June 25, 2016, 03:55, Rob roomberg@... [regenrx] <
> regenrx@yahoogroups.com> wrote:
>
>
>
>
> I'm building an audio amplifier for the 7.16 regen circuit.
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> I found a circuit on the web that uses an MPF102 pre-amp and a TDA7052
> amplifier chip:
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> I put it here to share it:
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> http://www.learnmorsecode.com/amp/1w_Punch_amp_schematic_MPF102andTDA7052.jpg
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> The circuit says C1 is 1u
> which I assume is 1uF
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> a polarized electrolytic.
> So what IS it?
> I have no 1uF capacitors here that are not polarized electrolytic so I'm
> sort of stumped.
> Can I use my electrolytic 1uF cap or must this C1 NOT be an electrolytic?
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> Which way is the correct way to point a 1uF electrolytic cap?
> I found multiple amplifier schematics on the web that use this TDA7052 chip
> that show that capacitor as 1uF and 2.2uF and points with the + toward
> the TDA7052 input pin
> and another schematic with the + pointing away from the input pin.
>
>
>

26690. Re: [regenrx] Which way does this capacitor go

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-25 17:56:02 UTC
From: hudakjm@...
Topic: 26666 Message: 26690

I agree. There is no way you'd get more than a few picofarads out of a gimmick capacitor.

In the circuit diagram, unlike C2 which is an electrolytic cap, C1 is drawn with two straight lines and no "positive" marking so that indicates a non-electrolytic capacitor. It won't be that difficult to find a 1uF film capacitor if you should wish to go that route.

Actually these days you can get non-polarized film capacitors in much higher values. I've seen them available up into the hundreds of microfarad range, but they tend to get very large in size and very expensive, especially for ones that have higher voltage ratings suitable for vacuum tube circuits.

John

26691. Re: [regenrx] Which way does this capacitor go brain cells

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-25 17:58:06 UTC
From: Rob
Topic: 26666 Message: 26691

THANK YOU for the suggestions.

I found a picture on an EBAY listing:
50pcs Monolithic Ceramic Chip Capacitor 1uF 105 50V Pitch 5.08MM New M

..... and for a dollar.

Is there any reason to NOT use these monolithic ceramic capacitors instead
of a pair of bucking electrolytics?

Is there any reason this circuit cares if I use just one electrolytic?

http://www.learnmorsecode.com/amp/1w_Punch_amp_schematic_MPF102andTDA7052.jpg

or if the direction of the electrolytic is one way or the other?

I'm just trying to wrap some brain cells around the idea that I did find
both directions in
the multiple circuit examples on the web using this TDA7052 amplifier chip.

On 06/25/2016 12:33 PM, Jim Pruitt jpruitt67@... [regenrx] wrote:
> I seriously doubt that you can get 1 microfarad of capacity from a
> gimmick capacitor. You might get a few picofarads.
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> It was asked if the cap is electrolytic. No, it is a monolithic or
> paper film and they do make monolithic and paper film caps up to a few
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> and wire them bucking (negative to negative or positive to positive)
> which makes a non polarized capacitor.
>
> Jim
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>
> On Sat, Jun 25, 2016 at 6:53 AM, Brian Ford kf4tap@...
> <mailto:kf4tap@...> [regenrx] <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>> wrote:
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> If you do not have the standard non electrolic cap, and it is 1u.
> You could use the gimmick capicitor. Two wires twisted together.
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> <mailto:roomberg@...> [regenrx] <regenrx@yahoogroups.com
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> that show that capacitor as 1uF and 2.2uF and points with the
> + toward
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> and another schematic with the + pointing away from the input pin.
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26692. RE: [regenrx] Re: Transceiver build with regen completed

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-25 17:59:06 UTC
From: Hubert Miller
Topic: 26581 Message: 26692

What did WESKIT call this model?

The only kit of theirs (that i am familiar with, but possibly things continue to pop up) that does this is the “Midget Radio Company” (of same Kearney Nebraska)

“Tinidyne” radio-talkie, page 27 of July 1940 Popular Science. This thing wasn’t advertised very long. It says 100-150 foot range and size 3 x 4.75 x 1.5 inches.

I think two tubes; plural but number not specified. My thinking is that they used the headphones for a microphone (dynamic microphone) but the headphones

were not included in the price. If you have the construction docs for that radio gizmo, i think it’s wonderful they survived, and if you publish them, that would be

doing many Midget Radio Company – Western Radio Company – WESKIT fans a great favor. The price of the “Tinidyne” was $5.99
I still would be astounded if WESKIT or Midget Radio Company used a 3-winding mic transformer in any of their kits. That was an expense item i just don’t think fit

their style of ‘minimum parts count’ and ‘minimum expense’ product.

I have the WESKIT BN-1 and Sky Rambler receiver, a Pakette, some VHF converters, a WESKIT catalog and some of the instruction sheets which came with their

crystal radios. (Some of the crystal radio lit is pretty optimistic, like connecting the antenna clip to your bicycle. Yeah, right, if you’re next to the transmitter site!)

The 1950s toy “Walkie Talkies” Western Radio (same company) advertised were simply two handsets which used war-surplus sound-powered elements. The ads

didn’t exactly emphasize that the walkie talkies needed to be connected by wire.

regards-

Hue Miller

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Subject: [regenrx] Re: Transceiver build with regen completed

Well I am not going to get into a pissing contest over the Weskit but I DO HAVE THE BUILDING DOCUMENTATION complete with box and construction notes and if you would like I will produce the part numbers for the "walkie talkie" transformer if you like that you say never existed. I have PN's from two different manufacturers. I suppose there is a ghost left from the old WESKIT days lurking on the internet making up all this phony docs and manufacturer specs that I have in my hands??

TIM

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26693. RE: [regenrx] Re: Transceiver build with regen completed

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-25 18:09:55 UTC
From: Hubert Miller
Topic: 26581 Message: 26693

The “Tinidyne” ad says complete with flashlight batteries inside and “Mike-Phone” (quotes verbatim). “Mike-Phone” means they are using the headphone

as a dynamic microphone. (Some of the 10-in-1 kit type things did that too.) (It “sort of” works, in my experience). So if your kit instructions have a carbon

mic and mic transformer, then the instructions you have are not the “Tinidyne”, and i’m wondering what kit it was.

-Hue

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26694. Re: [regenrx] Which way does this capacitor go brain cells

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-25 18:12:23 UTC
From: Jim Pruitt
Topic: 26666 Message: 26694

The only reason to use 2 bucking electrolytics is if you need a non polarized capacitor of that value and do not have it in any other form.

Personally I would use the ceramic or monolithic capacitors as the footprint is smaller and takes up less board space.

Good luck.
Jim Pruitt

On Sat, Jun 25, 2016 at 10:58 AM, Rob roomberg@... [regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> THANK YOU for the suggestions.
>
> I found a picture on an EBAY listing:
> 50pcs Monolithic Ceramic Chip Capacitor 1uF 105 50V Pitch 5.08MM New M
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> ..... and for a dollar.
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> Is there any reason to NOT use these monolithic ceramic capacitors instead
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> Is there any reason this circuit cares if I use just one electrolytic?
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>> I have not had coffee yet, please excuse any spelling faults.
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>>
>> Sent from Yahoo Mail for iPad <https://yho.com/footer0>
>>
>> On Saturday, June 25, 2016, 03:55, Rob <roomberg@...>roomberg@...
>> [regenrx] <regenrx@yahoogroups.com> wrote:
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>> I'm building an audio amplifier for the 7.16 regen circuit.
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>> I found a circuit on the web that uses an MPF102 pre-amp and a TDA7052
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>> the TDA7052 input pin
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26695. Re: [regenrx] Which way does this capacitor go higher voltages

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-25 18:20:26 UTC
From: Rob
Topic: 26666 Message: 26695

The mission is strictly to build an audio amp for the 7.16 ceramic
resonator regen circuit:
http://www.learnmorsecode.com/716/716.html
and
if at all possible to use the dirt cheapest ..and easiest
configuration..... so it can be successfully repeated with kids...
scouts.....
for the lowest cost because all the radios will be donated by
volunteers... geeks like us.
Its not a money making venture.
It looks like the total cost could be kept under $5.... not including
the 9 volt battery.
AND
it doesn't take a $5 DURACELL battery to run this thing.
I've been using dollar KODAK 9 volt batteries.

The TDA7052 costs 35 cents but uses less supporting components and
sounds better
than cheaper audio chips like LM386 so I was looking to learn more about
how to use the TDA7052
http://www.learnmorsecode.com/amp/1w_Punch_amp_schematic_MPF102andTDA7052.jpg

I'm trying to keep the parts count low so the kids have less chance of
construction failures.

And there will be no tube high voltages.

On 06/25/2016 01:56 PM, hudakjm@... [regenrx] wrote:
>
> I agree. There is no way you'd get more than a few picofarads out of
> a gimmick capacitor.
>
> In the circuit diagram, unlike C2 which is an electrolytic cap, C1 is
> drawn with two straight lines and no "positive" marking so that
> indicates a non-electrolytic capacitor. It won't be that difficult to
> find a 1uF film capacitor if you should wish to go that route.
>
> Actually these days you can get non-polarized film capacitors in much
> higher values. I've seen them available up into the hundreds of
> microfarad range, but they tend to get very large in size and very
> expensive, especially for ones that have higher voltage ratings
> suitable for vacuum tube circuits.
>
> John
>
>

> ---
>

26696. Re: [regenrx] Which way does this capacitor go

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-25 18:49:05 UTC
From: Jim Pruitt
Topic: 26666 Message: 26696

Higher value paper film have been around for decades. Tektronix used to use 5mf and 10mf paper film in their scopes. 1mf monolithic were also common. Now it is harder to get things in higher voltages though since most things have gone solid state. 12 volts being the most common but still see solid state devices to 48 volts as used in some high power amplifiers.

Using a monolithic would take up a lot less room on a board than using a paper film and they are cheaper too.

You have lots of options for that circuit you posted.

Good luck.

Jim Pruitt

On Sat, Jun 25, 2016 at 10:56 AM, hudakjm@... [regenrx] <
regenrx@yahoogroups.com> wrote:

>
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> I agree. There is no way you'd get more than a few picofarads out of a
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> higher values. I've seen them available up into the hundreds of microfarad
> range, but they tend to get very large in size and very expensive,
> especially for ones that have higher voltage ratings suitable for vacuum
> tube circuits.
>
> John
>
>

26697. re: batteries cheap

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-25 18:48:43 UTC
From: Hubert Miller
Topic: 26697 Message: 26697

Speaking of batteries, i was at the Dollar Store yesterday picking up some things.
(I have found some great books among their “remaindered” book offerings, and if you choose very carefully, you can actually find

healthful food items.)

Anyway i needed some AAA batteries. They had two brands, “Sunbeam” 8 “Super Heavy Duty” for $1. (i have found these aren’t quite

what i would call “super heavy duty.”)

The other brand was Panasonic, which was my choice, as i like my Walkman-type radio to not suddenly die when i’m out hiking.

In the Panasonic packaging, there were two offerings.

One package had 2 batteries for $1.

The other package, exactly the same battery, had 3 batteries for $1.

It was a tough decision! I was trying to understand the rationale. Maybe this was some kind of New Age consciousness at work:

Maybe you only needed 2. So why take more than you really need? Resist greed!

(I couldn’t.)

-Hue Miller

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26698. RE: [regenrx] Re: Transceiver build with regen completed

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-25 19:57:15 UTC
From: Hubert Miller
Topic: 26581 Message: 26698

What i SAID was

1- WESKIT did not produce a modulated transmitter or transceiver, except for a Western Radio branded 1-transistor “broadcaster” handie-talkie.

(BTW, Western Radio apparently got in trouble with the law, over their distance claims in early ads for this kit, according to an article

in Electronics Illustrated.)

2- WESKIT did not use an audio transformer in any of their products, let alone a 3-winding mic transformer.

I did NOT say such a transformer does not exist, as i have such transformers.

What you are building, it sounds like, is a replica of the BN-1, with modifications.

-Hue Miller

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Saturday, June 25, 2016 5:40 AM
To: regenrx@yahoogroups.com
Subject: [regenrx] Re: Transceiver build with regen completed

Well I am not going to get into a pissing contest over the Weskit but I DO HAVE THE BUILDING DOCUMENTATION complete with box and construction notes and if you would like I will produce the part numbers for the "walkie talkie" transformer if you like that you say never existed. I have PN's from two different manufacturers. I suppose there is a ghost left from the old WESKIT days lurking on the internet making up all this phony docs and manufacturer specs that I have in my hands??

TIM

26699. Re: [regenrx] Which way does this capacitor go

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-25 20:21:32 UTC
From: Jim Simmons
Topic: 26666 Message: 26699

Rob,

Just go ahead and use the 1uF electrolytic, if that's what you have. Connect the positive (+) end to the drain of the MPF102, and the negative (-) end to the TDA7052. This should work fine business. BTW, it doesn't even have to be a 1uF capacitor. I would venture that if it's value is much higher (like 10 - 20uF) your circuit would work for the purpose intended.

Jim ~ N5MSJ

On 6/25/2016 3:55 AM, Rob roomberg@... [regenrx] wrote:
>
> I'm building an audio amplifier for the 7.16 regen circuit.
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> I found a circuit on the web that uses an MPF102 pre-amp and a TDA7052
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26700. Submini Tubes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-25 21:34:30 UTC
From: Leonard Meek
Topic: 26700 Message: 26700

I just ran some tests on my submini tubes, 433 and 447. The results for the 433 were as follows:
Gm=290
Rp=138K
mu=40

The results for the 447 were simular;
Gm=200
Rp=140K
mu=28

Both tests were run with the positive filament voltage on pin 2, negative on pin 3. When I reversed the voltage on pins 2 and 3, I got the following results for the 433:
Gm-200
Rp=150K
mu=30

I realize that the polarity of the filament connections can affect the bias felt on the grid in some tubes. In any case, the accuracy of my tests are sketchy at best, being done on a cluttered bench amid piles of junk. Also, my calculations may not be entirely believeable. But the relative figures will help in predicting the results of my next circuit creation.

Leonard

26701. Re: [regenrx] Which way does this capacitor go

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-25 21:46:47 UTC
From: Rob
Topic: 26666 Message: 26701

thanks

revised:

http://www.learnmorsecode.com/amp/1w_Punch_amp_schematic_MPF102andTDA7052B.jpg

On 06/25/2016 04:21 PM, Jim Simmons orion@... [regenrx] wrote:
>
> Rob,
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> Just go ahead and use the 1uF electrolytic, if that's what you have.
> Connect the positive (+) end to the drain of the MPF102, and the
> negative (-) end to the TDA7052. This should work fine business. BTW,
> it doesn't even have to be a 1uF capacitor. I would venture that if
> it's value is much higher (like 10 - 20uF) your circuit would work for
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>> amplifier chip:
>>
>> I put it here to share it:
>> http://www.learnmorsecode.com/amp/1w_Punch_amp_schematic_MPF102andTDA7052.jpg
>>
>> The circuit says C1 is 1u
>> which I assume is 1uF
>> an does not show a + symbol or curve so I would think that capacitor
>> is not
>> a polarized electrolytic.
>> So what IS it?
>> I have no 1uF capacitors here that are not polarized electrolytic so I'm
>> sort of stumped.
>> Can I use my electrolytic 1uF cap or must this C1 NOT be an electrolytic?
>>
>> Which way is the correct way to point a 1uF electrolytic cap?
>> I found multiple amplifier schematics on the web that use this
>> TDA7052 chip
>> that show that capacitor as 1uF and 2.2uF and points with the + toward
>> the TDA7052 input pin
>> and another schematic with the + pointing away from the input pin.

>>
>
>

26702. RE: [regenrx] Submini Tubes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-25 22:00:56 UTC
From: Hubert Miller
Topic: 26700 Message: 26702

Leonard, how did you determine the filament voltage for those tubes?
I am still perplexed by your report of how quickly these tubes seem to degrade.
I don't see how the designers could lab-test the superregenerative proximity fuze design and optimize it, if that was the case.
I think the Gm figures you got are not out of line with subminis of that era. The Rp seems a little bit low but i only say "seems to me (only)".
Interesting info on the tubes anyway. Are they marked as to manufacturer, or any kind of date-code?
-Hue

-----Original Message-----
From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Saturday, June 25, 2016 2:35 PM
To: regenrx@yahoogroups.com
Subject: [regenrx] Submini Tubes

I just ran some tests on my submini tubes, 433 and 447. The results for the 433 were as follows:
Gm=290
Rp=138K
mu=40

The results for the 447 were simular;
Gm=200
Rp=140K
mu=28

Both tests were run with the positive filament voltage on pin 2, negative on pin 3. When I reversed the voltage on pins 2 and 3, I got the following results for the 433:
Gm-200
Rp=150K
mu=30

I realize that the polarity of the filament connections can affect the bias felt on the grid in some tubes. In any case, the accuracy of my tests are sketchy at best, being done on a cluttered bench amid piles of junk. Also, my calculations may not be entirely believeable. But the relative figures will help in predicting the results of my next circuit creation.

Leonard

26703. Re: Transceiver build with regen completed

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-25 22:09:40 UTC
From: Tim Haake
Topic: 26581 Message: 26703

Well I need to go out in the backyard and eat some worms. I found my paperwork and it is a CW rig just like is shown on the list. What I had with it was a copy of a print from an old "Radio & Television" magazine that uses 2 each 3A5 tubes. It has the"walkie talkie transformer in it. I then found still another copy of a 2-tuber with same transformer but this one is for a VHF talkie.

SORRY, ME BAD.
TIM

26704. Re: [regenrx] TRF to REGEN

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-25 22:31:12 UTC
From: husnu kokturk
Topic: 26646 Message: 26704

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Index of /h/u/husnu66tr/receivers

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From: "Tim Haake dubtub88@... [regenrx]" <regenrx@yahoogroups.com>
To: "regenrx@yahoogroups.com" <regenrx@yahoogroups.com>
Sent: Wednesday, June 15, 2016 5:45 PM
Subject: [regenrx] TRF to REGEN

I have collected over the years a few TRF receivers. Several are real beauties and a few need the whole gammit of wood restoration. In all they may have been a marvel of the day but a pain to use on any regular basis, at least for me.
SO, I am thinking about taking probably one of my "3-dials" since that's mostly what I have, and not a pretty one, and making it a regen to see what I come up with on the BC bands.
Has anyone put any effort serious or otherwise with making a conversion like this? I've got several Ideas on doing it but want hopefully some comments if anyone wants. After all the big intent of those designs was NOT to make the amplifiers interact with each other.
 Close to a regen but no cigar. Wonder what the thinking was?
TIM

26705. Seeking Weskit info

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-25 23:41:17 UTC
From: Kenneth Ketner
Topic: 26705 Message: 26705

Greetings folks. I have a Weskit mm3a Mitey Mite transceiver I am going to restore. Looking for the instructions. Got a schematic.
Also looking for info on other Weskit products.

73
Ken Ketner
KA5ELD
PO Box 65135
Lubbock, TX 79464-5135
Sent from my iPad

26706. RE: [regenrx] Seeking Weskit info

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-26 00:25:59 UTC
From: Hubert Miller
Topic: 26705 Message: 26706

I think WESKIT and the Mitey Mite were two different things. If you mean the radio that used something like 12AU6 50C5 35W4, that was built elsewhere.

I couldn’t immediately find it by google, but i know i read an article on the web about it.

The main problem i noticed about the Mitey Mite is that the antenna went right to the top of the trans tuned circuit – zero harmonic suppression.

The Western Radio BN-1 (or BA-80-40 later model) was inferior to the MM but at least had a better output circuit, a link.

-Hue

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Saturday, June 25, 2016 4:41 PM
To: regenrx@yahoogroups.com
Subject: [regenrx] Seeking Weskit info

Greetings folks. I have a Weskit mm3a Mitey Mite transceiver I am going to restore. Looking for the instructions. Got a schematic.
Also looking for info on other Weskit products.

73
Ken Ketner

KA5ELD

PO Box 65135

Lubbock, TX 79464-5135

Sent from my iPad

26707. Re: [regenrx] Submini Tubes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-26 01:08:39 UTC
From: Leonard Meek
Topic: 26700 Message: 26707

Hue, the tubes I just tested (433 & 447) were probably hearing aid tubes. Those were the only markings on them. I thought they may have been Japanese since they look like the tubes in a Japanese hearing aid that I used to have. I gave up on the proximity tubes because they didn't seem to be too stable. Maybe I just had a bummer. I would guess that they had good quality tubes for lab testing but the specs may have slipped a bit for the production tubes since they weren't going to have much of a life span. Also, they have been rejects. I guessed at the filament voltage. 1.5V lit them up pretty bright. Many other submini tubes have filaments rated at 1.25V +/- 20%. One proximity fuze schematic I have showed two tube filaments in series. Since the "energizer" was a wet cell, I assuned it was a 2V circuit, putting 1V on each tube. The hearing aid tubes are probably 1.25 +/- 20% since they most likely worked off dry batterues. I thought the Rp was fairly high for triodes, but then these are pretty old tubes and the Gm is fairly low. Anyway, fun is still happening.

Leonard

----- Original Message -----
From: "Hubert Miller kargo_cult@... [regenrx]" <regenrx@yahoogroups.com>
To: <regenrx@yahoogroups.com>
Sent: Saturday, June 25, 2016 12:00 PM
Subject: RE: [regenrx] Submini Tubes

> Leonard, how did you determine the filament voltage for those tubes?
> I am still perplexed by your report of how quickly these tubes seem to
> degrade.
> I don't see how the designers could lab-test the superregenerative proximity
> fuze design and optimize it, if that was the case.
> I think the Gm figures you got are not out of line with subminis of that
> era. The Rp seems a little bit low but i only say "seems
> to me (only)".
> Interesting info on the tubes anyway. Are they marked as to manufacturer, or
> any kind of date-code?
> -Hue
>
> -----Original Message-----
> From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
> Sent: Saturday, June 25, 2016 2:35 PM
> To: regenrx@yahoogroups.com
> Subject: [regenrx] Submini Tubes
>
> I just ran some tests on my submini tubes, 433 and 447. The results for the
> 433 were as follows:
> Gm=290
> Rp=138K
> mu=40
>
> The results for the 447 were simular;

> Gm=200
> Rp=140K
> mu=28
>
> Both tests were run with the positive filament voltage on pin 2, negative on
> pin 3. When I reversed the voltage on pins 2 and 3, I got the following
> results for the 433:
> Gm-200
> Rp=150K
> mu=30
>
> I realize that the polarity of the filament connections can affect the bias
> felt on the grid in some tubes. In any case, the accuracy of my tests are
> sketchy at best, being done on a cluttered bench amid piles of junk. Also,
> my calculations may not be entirely believeable. But the relative figures
> will help in predicting the results of my next circuit creation.
>
> Leonard
>
>
>
> ------------------------------------
> Posted by: Hubert Miller <kargo_cult@...>
> ------------------------------------
>
> "In the interest of Regenerating radio's lost art of Regeneration"
> ------------------------------------
>
> Yahoo Groups Links
>
>
>
>

26708. Re: [regenrx] Re: Transceiver build with regen completed

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-26 04:40:18 UTC
From: Theosleaper
Topic: 26581 Message: 26708

Hello,
If looking for a carbon mic transformer, consider the Hammond 146 series.
Rick, K1wyh

On 6/25/2016 6:09 PM, Tim Haake dubtub88@... [regenrx] wrote:
> Well I need to go out in the backyard and eat some worms. I found my
> paperwork and it is a CW rig just like is shown on the list. What I
> had with it was a copy of a print from an old "Radio & Television"
> magazine that uses 2 each 3A5 tubes. It has the"walkie talkie
> transformer in it. I then found still another copy of a 2-tuber with
> same transformer but this one is for a VHF talkie.
>
>
> SORRY, ME BAD.
>
> TIM
>

26709. Mitey Mite article

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-26 07:08:57 UTC
From: Hubert Miller
Topic: 26709 Message: 26709

Thanks to Pete, WA2CWA, answering my question on the Glowbugs list, for suggesting this link:

http://w0vlz.blogspot.com/search/label/Mitey%20Mite

The transmitter should NOT be put on the air as designed.

-Hue

26710. re: mic xfmr (was: Transceiver build with regen completed)

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-26 07:25:21 UTC
From: Hubert Miller
Topic: 26710 Message: 26710

If you’re building from scratch, one way to beat the carbon mic expense is to use a grounded base or gg tube amplifier with the carbon mic in the emitter/ or cathode to

ground. That does mean one triode section or one transistor. Someone on the milsurplus list recently posted a simple circuit for a carbon mic booster. Some of the

military carbon mics were intended for close-talking and are very insensitive.

About 10 years ago i was given a pallet load of 1950s VHF aircraft radios. I took the tubes and transformers out and gave most of those parts away – big expense

of time, but i didn’t want to just metal-recycle them. This talk about carbon mics reminds me i need to inventory what i have left and get rid of most of it. (The

radios were without any control boxes and had no collector value at all.) I am never going to build an AM transmitter from scratch, so i hardly need any of that.

I have used old carbon mic input transformers as audio chokes in low power circuits. In mic service the secondary is rated around 300,000 ohm impedance, so

there’s a lot of turns of wire. However the wire is very thin, probably #38, so it’s only for low currents, and maybe should even be fused if used in a B+ circuit.

I have also thought about using them reversed in crystal set radios, to drop the detector Hi-impedance circuit down to 600 or 300 ohm mag headphones.

-Hue

26711. Re: [regenrx] Mitey Mite article

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-26 07:35:16 UTC
From: <kx4tt@...>
Topic: 26709 Message: 26711

Niel does some fine work - check out https://www.prismnet.com/~nielw/wa5vlz.htm for more from W0VLZ.....

73 de KX4TT Lee ZUT SK

From: Hubert Miller kargo_cult@msn.com [regenrx]
Sent: ☐Sunday☐, ☐June☐ ☐26☐, ☐2016 ☐07☐:☐08☐
To: regenrx@yahoogroups.com

Thanks to Pete, WA2CWA, answering my question on the Glowbugs list, for suggesting this link:

http://w0vlz.blogspot.com/search/label/Mitey%20Mite

The transmitter should NOT be put on the air as designed.

-Hue

26712. Re: [regenrx] re: mic xfmr (was: Transceiver build with regen completed)

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-26 11:23:11 UTC
From: Prof. Arnaldo Coro Antich
Topic: 26710 Message: 26712

Good Sunday amigos !
What a thrill to see something posted about
carbon microphones !!!
My very first AM rig, built with expert guidance
of my mentor CM2DK Ignacio, used a carbon
microphone removed from a local phone,¨donated
by the friendly telephone company repairman¨
BTW, ¨friendly phone company repairman no
longer exist even in Antartica for the local network ¨
Anyway... I used, as prescribed a 6SN7 double
triode, with the first triode grid grounded and the carbon mike
connected to the cathode, but that required a .01 disc ceramic capacitor
to prevent a ¨howl¨ from RF leaking back.
The other half of the 6SN7 fed the 6L6G grid
and the plate of the ¨modulator¨ went to
a 10 Henry choke in a classic Heising modulator.
The RF section was a crystal controlled 6L6G
in version one, improved to a 6AG7 crystal
oscillator driving the 6L6G on the single available quartz crystal 7050
kiloHertz, and this contraption connected to a half wave dipole
with telephone company downlead provided excellent two way AM contacts
all over Cuba,
parts of Mexico and the Antilles...
Of course... you guessed right: this was happening during the peak of
Super Solar Cycle
19....
Good old days to remember amigos !!!
73 and DX
Arnie Coro
CO2KK

26713. Re: [regenrx] re: mic xfmr (was: Transceiver build with regen completed)

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-26 14:15:24 UTC
From: Brian Ford
Topic: 26710 Message: 26713

blockquote, div.yahoo_quoted { margin-left: 0 !important; border-left:1px #715FFA solid !important; padding-left:1ex !important; background-color:white !important; } I remember you talking about them back then, I was rather envious. I live in these techno isolated areas.
Keith

Sent from Yahoo Mail for iPad

On Sunday, June 26, 2016, 02:25, Hubert Miller kargo_cult@... [regenrx] <regenrx@yahoogroups.com> wrote:

If you're building from scratch, one way to beat the carbon mic expense is to use a grounded base or gg tube amplifier with the carbon mic in the emitter/ or cathode to

ground. That does mean one triode section or one transistor. Someone on the milsurplus list recently posted a simple circuit for a carbon mic booster. Some of the

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there's a lot of turns of wire. However the wire is very thin, probably #38, so it's only for low currents, and maybe should even be fused if used in a B+ circuit.

I have also thought about using them reversed in crystal set radios, to drop the detector Hi-impedance circuit down to 600 or 300 ohm mag headphones.

-Hue

-- #ygrp-mkp {border:1px solid #d8d8d8;font-family:Arial;margin:10px 0;padding:0 10px;}#ygrp-mkp hr {border:1px solid #d8d8d8;}#ygrp-mkp #hd {color:#628c2a;font-size:85%;font-weight:700;line-height:122%;margin:10px 0;}#ygrp-mkp #ads {margin-bottom:10px;}#ygrp-mkp .ad {padding:0 0;}#ygrp-mkp .ad p {margin:0;}#ygrp-mkp .ad a {color:#0000ff;text-decoration:none;}#ygrp-sponsor #ygrp-lc {font-family:Arial;}#ygrp-sponsor #ygrp-lc #hd {margin:10px 0px;font-weight:700;font-size:78%;line-height:122%;}#ygrp-sponsor #ygrp-lc .ad {margin-bottom:10px;padding:0 0;}#actions {font-family:Verdana;font-size:11px;padding:10px

0;}#activity {background-color:#e0ecee;float:left;font-family:Verdana;font-size:10px;paddi
ng:10px;}#activity span {font-weight:700;}#activity span:first-child
{text-transform:uppercase;}#activity span a {color:#5085b6;text-decoration:none;}#activity
span span {color:#ff7900;}#activity span .underline {text-decoration:underline;}.attach
{clear:both;display:table;font-family:Arial;font-size:12px;padding:10px
0;width:400px;}.attach div a {text-decoration:none;}.attach img
{border:none;padding-right:5px;}.attach label {display:block;margin-bottom:5px;}.attach
label a {text-decoration:none;}blockquote {margin:0 0 0 4px;}.bold
{font-family:Arial;font-size:13px;font-weight:700;}.bold a {text-decoration:none;}dd.last
p a {font-family:Verdana;font-weight:700;}dd.last p span
{margin-right:10px;font-family:Verdana;font-weight:700;}dd.last p span.yshortcuts
{margin-right:0;}div.attach-table div div a {text-decoration:none;}div.attach-table
{width:400px;}div.file-title a, div.file-title a:active, div.file-title a:hover,
div.file-title a:visited {text-decoration:none;}div.photo-title a, div.photo-title
a:active, div.photo-title a:hover, div.photo-title a:visited
{text-decoration:none;}div#ygrp-mlmsg #ygrp-msg p a span.yshortcuts
{font-family:Verdana;font-size:10px;font-weight:normal;}.green {color:#628c2a;}.MsoNormal
{margin:0 0 0 0;}o {font-size:0;}#photos div {float:left;width:72px;}#photos div div
{border:1px solid #666666;height:62px;overflow:hidden;width:62px;}#photos div label {color
:#666666;font-size:10px;overflow:hidden;text-align:center;white-space:nowrap;width:64px;}#
reco-category {font-size:77%;}#reco-desc {font-size:77%;}.replbq {margin:4px;}#ygrp-actbar
div a:first-child {margin-right:2px;padding-right:5px;}#ygrp-mlmsg
{font-size:13px;font-family:Arial, helvetica, clean, sans-serif;}#ygrp-mlmsg table
{font-size:inherit;font:100%;}#ygrp-mlmsg select, input, textarea {font:99% Arial,
Helvetica, clean, sans-serif;}#ygrp-mlmsg pre, code {font:115% monospace;}#ygrp-mlmsg *
{line-height:1.22em;}#ygrp-mlmsg #logo {padding-bottom:10px;}#ygrp-msg p a
{font-family:Verdana;}#ygrp-msg p#attach-count span
{color:#1E66AE;font-weight:700;}#ygrp-reco #reco-head
{color:#ff7900;font-weight:700;}#ygrp-reco {margin-bottom:20px;padding:0px;}#ygrp-sponsor
#ov li a {font-size:130%;text-decoration:none;}#ygrp-sponsor #ov li
{font-size:77%;list-style-type:square;padding:6px 0;}#ygrp-sponsor #ov ul
{margin:0;padding:0 0 0 8px;}#ygrp-text {font-family:Georgia;}#ygrp-text p {margin:0 0 1em
0;}#ygrp-text tt {font-size:120%;}#ygrp-vital ul li:last-child {border-right:none
!important;}

26714. Weskit Bn 1 and United Mitey mite mm3a

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-26 17:05:54 UTC
From: Kenneth Ketner
Topic: 26714 Message: 26714

You are correct. I had some stuff from both sets on my bench, and got them crossed in my brain. Mm was produced by United surplus materials. Schematic is marked May 1948. Usm must have been physically big for a while because the schematic shows their address in Chicago as 3313-19 West Ogden ave. yes the mm tx is a wreck, lousy output to antenna, no suppression of harmonics, just a wire. I haven't attempted to light the tx, however rx shows signs of possibly working a bit... Presently there remains some undetected flaw or ornery little piece of out of place crud.

I have some paperwork on the Weskit bn1 from the web, but no Bn 1. I hope to build a clone.

Actually, I am hoping for info or leads on either, but more so in support of lashing up a scratch built bn1.

Many thanks.... I really enjoy this regen group

73

Ken Ketner
KA5ELD
PO Box 65135
Lubbock, TX 79464-5135
Sent from my iPad

26715. RE: [regenrx] TRF to REGEN

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-26 18:22:57 UTC
From: Hubert Miller
Topic: 26646 Message: 26715

I don’t know if anyone answered this or not. The thinking with the TRFs was to give the average non-technical, non-knob tweaker a simple

reliable radio that didn’t require real careful control adjustments like a regen. Part of the evolution toward giving the non-technically interested

a radio with just tuning and volume controls. The tubes used in early radios, triodes, were prone to self oscillation, so circuits were developed

to cancel that.

-Hue

Has anyone put any effort serious or otherwise with making a conversion like this? I've got several Ideas on doing it but want hopefully some comments if anyone wants. After all the big intent of those designs was NOT to make the amplifiers interact with each other. Close to a regen but no cigar. Wonder what the thinking was?

TIM

26716. More on Vacuum Tube Fuze tubes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-27 00:25:36 UTC
From: Hubert Miller
Topic: 26716 Message: 26716

Re the recent posts on the V-T fuze and the special tubes, here's an article from Radio-Craft magazine, Dec. 1945 -

http://www.americanradiohistory.com/Archive-Radio-Craft/1940s/Radio-Craft-1945-12.pdf

pages 18, 20, 60, 61 of 82 page PDF.

It says 130 million of the tubes were made!! Where did they all go? You'd think a lot were left over. Maybe not.

-Hue Miller

26717. Re: [regenrx] Re: Adding a simple Q-multiplier to a crystal set

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-27 00:46:00 UTC
From: Brian Ford
Topic: 26666 Message: 26717

blockquote, div.yahoo_quoted { margin-left: 0 !important; border-left:1px #715FFA solid !important; padding-left:1ex !important; background-color:white !important; } Did you ever post a schematic of this q multiplier?
Keith

Sent from Yahoo Mail for iPad

On Friday, June 24, 2016, 06:44, parkerp@... [regenrx] <regenrx@yahoogroups.com> wrote:

Video demo at Q multiplier improves crystal set reception
-- #ygrp-mkp {border:1px solid #d8d8d8;font-family:Arial;margin:10px 0;padding:0 10px;}#ygrp-mkp hr {border:1px solid #d8d8d8;}#ygrp-mkp #hd {color:#628c2a;font-size:85%;font-weight:700;line-height:122%;margin:10px 0;}#ygrp-mkp #ads {margin-bottom:10px;}#ygrp-mkp .ad {padding:0 0;}#ygrp-mkp .ad p {margin:0;}#ygrp-mkp .ad a {color:#0000ff;text-decoration:none;}#ygrp-sponsor #ygrp-lc {font-family:Arial;}#ygrp-sponsor #ygrp-lc #hd {margin:10px 0px;font-weight:700;font-size:78%;line-height:122%;}#ygrp-sponsor #ygrp-lc .ad {margin-bottom:10px;padding:0 0;}#actions {font-family:Verdana;font-size:11px;padding:10px 0;}#activity {background-color:#e0ecee;float:left;font-family:Verdana;font-size:10px;padding:10px;}#activity span {font-weight:700;}#activity span:first-child {text-transform:uppercase;}#activity span a {color:#5085b6;text-decoration:none;}#activity span span {color:#ff7900;}#activity span .underline {text-decoration:underline;}.attach {clear:both;display:table;font-family:Arial;font-size:12px;padding:10px 0;width:400px;}.attach div a {text-decoration:none;}.attach img {border:none;padding-right:5px;}.attach label {display:block;margin-bottom:5px;}.attach label a {text-decoration:none;}blockquote {margin:0 0 0 4px;}.bold {font-family:Arial;font-size:13px;font-weight:700;}.bold a {text-decoration:none;}dd.last p a {font-family:Verdana;font-weight:700;}dd.last p span {margin-right:10px;font-family:Verdana;font-weight:700;}dd.last p span.yshortcuts {margin-right:0;}div.attach-table div div a {text-decoration:none;}div.attach-table {width:400px;}div.file-title a, div.file-title a:active, div.file-title a:hover, div.file-title a:visited {text-decoration:none;}div.photo-title a, div.photo-title a:active, div.photo-title a:hover, div.photo-title a:visited {text-decoration:none;}div#ygrp-mlmsg #ygrp-msg p a span.yshortcuts {font-family:Verdana;font-size:10px;font-weight:normal;}.green {color:#628c2a;}.MsoNormal {margin:0 0 0 0;}o {font-size:0;}#photos div {float:left;width:72px;}#photos div div {border:1px solid #666666;height:62px;overflow:hidden;width:62px;}#photos div label {color:#666666;font-size:10px;overflow:hidden;text-align:center;white-space:nowrap;width:64px;}#reco-category {font-size:77%;}#reco-desc {font-size:77%;}.replbq {margin:4px;}#ygrp-actbar div a:first-child {margin-right:2px;padding-right:5px;}#ygrp-mlmsg {font-size:13px;font-family:Arial, helvetica, clean, sans-serif;}#ygrp-mlmsg table {font-size:inherit;font:100%;}#ygrp-mlmsg select, input, textarea {font:99% Arial, Helvetica, clean, sans-serif;}#ygrp-mlmsg pre, code {font:115% monospace;}#ygrp-mlmsg * {line-height:1.22em;}#ygrp-mlmsg #logo {padding-bottom:10px;}#ygrp-msg p a {font-family:Verdana;}#ygrp-msg p#attach-count span {color:#1E66AE;font-weight:700;}#ygrp-reco #reco-head

{color:#ff7900;font-weight:700;}#ygrp-reco {margin-bottom:20px;padding:0px;}#ygrp-sponsor #ov li a {font-size:130%;text-decoration:none;}#ygrp-sponsor #ov li {font-size:77%;list-style-type:square;padding:6px 0;}#ygrp-sponsor #ov ul {margin:0;padding:0 0 0 8px;}#ygrp-text {font-family:Georgia;}#ygrp-text p {margin:0 0 1em 0;}#ygrp-text tt {font-size:120%;}#ygrp-vital ul li:last-child {border-right:none !important;}

26718. Re: [regenrx] More on Vacuum Tube Fuze tubes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-27 01:00:44 UTC
From: Phil
Topic: 26716 Message: 26718

Hue,

Most probably ended up having "Deadly Encounters of the worst kind" with
enemy Zeros and ships. Perhaps Uncle Sam destroyed any excess as
possibly leaking sensitive information. . .

73 From "The Beaconeer's Lair"
Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)

HF/LF RADIOS:
Grundigs: S-350 (~2006), G6 (2011) & S450DLX (2014).
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
Icom: IC-735 Transceiver (~1990).
Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
Icom: IC-7200 Transceiver (~2015).
R-Shack: DX-380 digital portable (~1990).
SDR: Softrock Ensemble II LF (built from a kit 2015).
Zenith: Royal-7000 Transoceanic Portable (~1968).

ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 4 Port Multicoupler, Feeds Antenna to 4 RX's.
HOMEBREW 8 Hz Audio Filter.
Timewave DSP-599zx Audio Filter.
Behringer 1202fx Audio Mixer (for mixing/routing audio).

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

On 6/27/2016 12:25 AM, Hubert Miller kargo_cult@... [regenrx] wrote:
>
> Re the recent posts on the V-T fuze and the special tubes, here?s an
> article from Radio-Craft magazine, Dec. 1945 ?
>
> http://www.americanradiohistory.com/Archive-Radio-Craft/1940s/Radio-Craft-1945-12.pdf
>
> pages 18, 20, 60, 61 of 82 page PDF.
>
> It says 130 million of the tubes were made!! Where did they all go?
> You?d think a lot were left over. Maybe not.
>
> -Hue Miller
>
>

26719. Re: [regenrx] More on Vacuum Tube Fuze tubes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-27 01:09:47 UTC
From: Leonard Meek
Topic: 26716 Message: 26719

Hue, I have that Radio Craft issue on my computer. It's a little different from OP1480, which came out in May 1946. According to the OP, the VT didn't stand for anythinf. It was just an ID for shipping purposes. I skimmed Radio Craft the article but still didn't see any mention of voltages. The one radio I built with the PF tubes worked fine at first , but now not so much. My battery voltages are still good, so I assume the tubes are failing. Of course I know what "assume" breaks down to. I'm trying another circuit now but it's not going too well. My eye sight is declining, and my XYL has a growing list of "honey do" projects for me.

Leonard

----- Original Message -----
From: Hubert Miller kargo_cult@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Sunday, June 26, 2016 2:25 PM
Subject: [regenrx] More on Vacuum Tube Fuze tubes

Re the recent posts on the V-T fuze and the special tubes, here's an article from Radio-Craft magazine, Dec. 1945 -

http://www.americanradiohistory.com/Archive-Radio-Craft/1940s/Radio-Craft-1945-12.pdf

pages 18, 20, 60, 61 of 82 page PDF.

It says 130 million of the tubes were made!! Where did they all go? You'd think a lot were left over. Maybe not.

-Hue Miller

26720. Re: [regenrx] More on Vacuum Tube Fuze tubes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-27 01:11:15 UTC
From: Leonard Meek
Topic: 26716 Message: 26720

I got at least 100 of them.

Leonard

----- Original Message -----
From: "Phil ko6bb1@... [regenrx]" <regenrx@yahoogroups.com>
To: <regenrx@yahoogroups.com>
Sent: Sunday, June 26, 2016 3:00 PM
Subject: Re: [regenrx] More on Vacuum Tube Fuze tubes

> Hue,
>
> Most probably ended up having "Deadly Encounters of the worst kind" with
> enemy Zeros and ships. Perhaps Uncle Sam destroyed any excess as
> possibly leaking sensitive information. . .
>
> 73 From "The Beaconeer's Lair"
> Phil, KO6BB
> http://www.qsl.net/ko6bb/ (Web Page)
>
> HF/LF RADIOS:
> Grundigs: S-350 (~2006), G6 (2011) & S450DLX (2014).
> HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
> Icom: IC-735 Transceiver (~1990).
> Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
> Icom: IC-7200 Transceiver (~2015).
> R-Shack: DX-380 digital portable (~1990).
> SDR: Softrock Ensemble II LF (built from a kit 2015).
> Zenith: Royal-7000 Transoceanic Portable (~1968).
>
> ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
> HOMEBREW 4 Port Multicoupler, Feeds Antenna to 4 RX's.
> HOMEBREW 8 Hz Audio Filter.
> Timewave DSP-599zx Audio Filter.
> Behringer 1202fx Audio Mixer (for mixing/routing audio).
>
> ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
> Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
> 37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.
>
> Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh
>
> On 6/27/2016 12:25 AM, Hubert Miller kargo_cult@... [regenrx] wrote:
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>> http://www.americanradiohistory.com/Archive-Radio-Craft/1940s/Radio-Craft-1945-12.pdf
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>> -Hue Miller
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>
> "In the interest of Regenerating radio's lost art of Regeneration"
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> Yahoo Groups Links
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26721. Re: [regenrx] TRF to REGEN

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-27 01:53:33 UTC
From: Charles Moizeau
Topic: 26646 Message: 26721

That certainly makes sense. Just having a tuning knob and a volume control was all you needed to pull in KDKA and, over time, other stations spaced plenty of kilocycles apart from each other.

The high sensitivity and selectivity of the regen weren't needed by plain Jane and ordinary Joe, who wouldn't tolerate that high-pitched audio howl that had to be carefully tamed by a third knob.

Charles

From: regenrx@yahoogroups.com <regenrx@yahoogroups.com> on behalf of Hubert Miller kargo_cult@... [regenrx] <regenrx@yahoogroups.com>
Sent: Sunday, June 26, 2016 2:22 PM
To: regenrx@yahoogroups.com
Subject: RE: [regenrx] TRF to REGEN

I don't know if anyone answered this or not. The thinking with the TRFs was to give the average non-technical, non-knob tweaker a simple
reliable radio that didn't require real careful control adjustments like a regen. Part of the evolution toward giving the non-technically interested
a radio with just tuning and volume controls. The tubes used in early radios, triodes, were prone to self oscillation, so circuits were developed
to cancel that.
-Hue

Has anyone put any effort serious or otherwise with making a conversion like this? I've got several Ideas on doing it but want hopefully some comments if anyone wants. After all the big intent of those designs was NOT to make the amplifiers interact with each other. Close to a regen but no cigar. Wonder what the thinking was?

TIM

26722. RE: [regenrx] More on Vacuum Tube Fuze tubes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-27 01:57:45 UTC
From: Hubert Miller
Topic: 26716 Message: 26722

There had to be a lot left over because the Allies were preparing for another year of war. Maybe a lot of it got dumped in the ocean along with other surplus.
-Hue

-----Original Message-----
From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Sunday, June 26, 2016 6:01 PM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] More on Vacuum Tube Fuze tubes

Hue,

Most probably ended up having "Deadly Encounters of the worst kind" with enemy Zeros and ships. Perhaps Uncle Sam destroyed any excess as possibly leaking sensitive information. . .

73 From "The Beaconeer's Lair"
Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)

26723. Re: [regenrx] More on Vacuum Tube Fuze tubes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-27 04:12:57 UTC
From: Leonard Meek
Topic: 26716 Message: 26723

Hue, I don't know how the seller came by them, but at a penny apeice it was too good a deal to pass up. I also got 100 diodes and 100 thyratrons, all proximity stuff, all for a penny apeice.

Leonard

----- Original Message -----
From: "Hubert Miller kargo_cult@... [regenrx]" <regenrx@yahoogroups.com>
To: <regenrx@yahoogroups.com>
Sent: Sunday, June 26, 2016 3:57 PM
Subject: RE: [regenrx] More on Vacuum Tube Fuze tubes

> There had to be a lot left over because the Allies were preparing for
> another year of war. Maybe a lot of it got dumped in the ocean along with
> other surplus.
> -Hue
>
> -----Original Message-----
> From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
> Sent: Sunday, June 26, 2016 6:01 PM
> To: regenrx@yahoogroups.com
> Subject: Re: [regenrx] More on Vacuum Tube Fuze tubes
>
> Hue,
>
> Most probably ended up having "Deadly Encounters of the worst kind" with
> enemy Zeros and ships. Perhaps Uncle Sam destroyed any excess as possibly
> leaking sensitive information. . .
>
> 73 From "The Beaconeer's Lair"
> Phil, KO6BB
> http://www.qsl.net/ko6bb/ (Web Page)
>
>
>
> ------------------------------------
> Posted by: Hubert Miller <kargo_cult@...>
> ------------------------------------
>
> "In the interest of Regenerating radio's lost art of Regeneration"
> ------------------------------------
>
> Yahoo Groups Links
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>

26724. Re: [regenrx] More on Vacuum Tube Fuze tubes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-27 10:23:32 UTC
From: Michael
Topic: 26716 Message: 26724

On 27.06.16 11:20, Michael wrote:

> This may well explain the "shortlongevity" of these tubes.
> Reportedly, allegedly, possibly, probably shoulderheld
> missiles which were somehow supplied to anti-Soviet combatants
> in Afghanistan ... included time-limited electronics,
> such that after a predetermined time lapse they became
> scrap metal.
>
> Michael
>
> On 27.06.16 02:00, Phil ko6bb1@... [regenrx] wrote:
>>
>> Most probably ended up having "Deadly Encounters of the worst kind" with
>> enemy Zeros and ships. Perhaps Uncle Sam destroyed any excess as
>> possibly leaking sensitive information. . .
>>
>> Phil, KO6BB
>> http://www.qsl.net/ko6bb/ (Web Page)

26725. Re: Weskit Bn 1 and United Mitey mite mm3a

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-27 11:44:54 UTC
From: buzzgiles@...
Topic: 26714 Message: 26725

Hi Ken,

I have an actual BN-1. I have done quite a few tests on the radio and have posted pictures of the internal layout on my site. http://kf9cm.com/PROJECTS.htm
http://kf9cm.com/PROJECTS.htm ,I hope to complete my tests soon.

73 de Gary, KF9CM

26726. Re: [regenrx] More on Vacuum Tube Fuze tubes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-27 12:53:15 UTC
From: Brian Ford
Topic: 26716 Message: 26726

blockquote, div.yahoo_quoted { margin-left: 0 !important; border-left:1px #715FFA solid !important; padding-left:1ex !important; background-color:white !important; } Wow Leonard, you racked up? All that for three bucks!
Keith

Sent from Yahoo Mail for iPad

On Sunday, June 26, 2016, 23:12, 'Leonard Meek' lemeek@... [regenrx] <regenrx@yahoogroups.com> wrote:

Hue, I don't know how the seller came by them, but at a penny apeice it was too good a deal to pass up. I also got 100 diodes and 100 thyratrons, all proximity stuff, all for a penny apeice.

Leonard

----- Original Message -----
From: "Hubert Miller kargo_cult@... [regenrx]" <regenrx@yahoogroups.com>
To: <regenrx@yahoogroups.com>
Sent: Sunday, June 26, 2016 3:57 PM
Subject: RE: [regenrx] More on Vacuum Tube Fuze tubes

> There had to be a lot left over because the Allies were preparing for
> another year of war. Maybe a lot of it got dumped in the ocean along with
> other surplus.
> -Hue
>
> -----Original Message-----
> From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
> Sent: Sunday, June 26, 2016 6:01 PM
> To: regenrx@yahoogroups.com
> Subject: Re: [regenrx] More on Vacuum Tube Fuze tubes
>
> Hue,
>
> Most probably ended up having "Deadly Encounters of the worst kind" with
> enemy Zeros and ships. Perhaps Uncle Sam destroyed any excess as possibly
> leaking sensitive information. . .
>
> 73 From "The Beaconeer's Lair"
> Phil, KO6BB
> http://www.qsl.net/ko6bb/ (Web Page)
>
>
>
> ------------------------------------

> Posted by: Hubert Miller <kargo_cult@...>
> ------------------------------------
>
> "In the interest of Regenerating radio's lost art of Regeneration"
> ------------------------------------
>
> Yahoo Groups Links
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-- #ygrp-mkp {border:1px solid #d8d8d8;font-family:Arial;margin:10px 0;padding:0
10px;}#ygrp-mkp hr {border:1px solid #d8d8d8;}#ygrp-mkp #hd
{color:#628c2a;font-size:85%;font-weight:700;line-height:122%;margin:10px 0;}#ygrp-mkp
#ads {margin-bottom:10px;}#ygrp-mkp .ad {padding:0 0;}#ygrp-mkp .ad p {margin:0;}#ygrp-mkp
.ad a {color:#0000ff;text-decoration:none;}#ygrp-sponsor #ygrp-lc
{font-family:Arial;}#ygrp-sponsor #ygrp-lc #hd {margin:10px
0px;font-weight:700;font-size:78%;line-height:122%;}#ygrp-sponsor #ygrp-lc .ad
{margin-bottom:10px;padding:0 0;}#actions {font-family:Verdana;font-size:11px;padding:10px
0;}#activity {background-color:#e0ecee;float:left;font-family:Verdana;font-size:10px;paddi
ng:10px;}#activity span {font-weight:700;}#activity span:first-child
{text-transform:uppercase;}#activity span a {color:#5085b6;text-decoration:none;}#activity
span span {color:#ff7900;}#activity span .underline {text-decoration:underline;}.attach
{clear:both;display:table;font-family:Arial;font-size:12px;padding:10px
0;width:400px;}.attach div a {text-decoration:none;}.attach img
{border:none;padding-right:5px;}.attach label {display:block;margin-bottom:5px;}.attach
label a {text-decoration:none;}blockquote {margin:0 0 0 4px;}.bold
{font-family:Arial;font-size:13px;font-weight:700;}.bold a {text-decoration:none;}dd.last
p a {font-family:Verdana;font-weight:700;}dd.last p span
{margin-right:10px;font-family:Verdana;font-weight:700;}dd.last p span.yshortcuts
{margin-right:0;}div.attach-table div div a {text-decoration:none;}div.attach-table
{width:400px;}div.file-title a, div.file-title a:active, div.file-title a:hover,
div.file-title a:visited {text-decoration:none;}div.photo-title a, div.photo-title
a:active, div.photo-title a:hover, div.photo-title a:visited
{text-decoration:none;}div#ygrp-mlmsg #ygrp-msg p a span.yshortcuts
{font-family:Verdana;font-size:10px;font-weight:normal;}.green {color:#628c2a;}.MsoNormal
{margin:0 0 0 0;}o {font-size:0;}#photos div {float:left;width:72px;}#photos div div
{border:1px solid #666666;height:62px;overflow:hidden;width:62px;}#photos div label {color
:#666666;font-size:10px;overflow:hidden;text-align:center;white-space:nowrap;width:64px;}#
reco-category {font-size:77%;}#reco-desc {font-size:77%;}.replbq {margin:4px;}#ygrp-actbar
div a:first-child {margin-right:2px;padding-right:5px;}#ygrp-mlmsg
{font-size:13px;font-family:Arial, helvetica, clean, sans-serif;}#ygrp-mlmsg table
{font-size:inherit;font:100%;}#ygrp-mlmsg select, input, textarea {font:99% Arial,
Helvetica, clean, sans-serif;}#ygrp-mlmsg pre, code {font:115% monospace;}#ygrp-mlmsg *
{line-height:1.22em;}#ygrp-mlmsg #logo {padding-bottom:10px;}#ygrp-msg p a
{font-family:Verdana;}#ygrp-msg p#attach-count span
{color:#1E66AE;font-weight:700;}#ygrp-reco #reco-head
{color:#ff7900;font-weight:700;}#ygrp-reco {margin-bottom:20px;padding:0px;}#ygrp-sponsor
#ov li a {font-size:130%;text-decoration:none;}#ygrp-sponsor #ov li

{font-size:77%;list-style-type:square;padding:6px 0;}#ygrp-sponsor #ov ul {margin:0;padding:0 0 0 8px;}#ygrp-text {font-family:Georgia;}#ygrp-text p {margin:0 0 1em 0;}#ygrp-text tt {font-size:120%;}#ygrp-vital ul li:last-child {border-right:none !important;}

26727. Re: [regenrx] More on Vacuum Tube Fuze tubes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-27 17:03:38 UTC
From: Leonard Meek
Topic: 26716 Message: 26727

The tubes were obviously no longer needed, since they were replaced by smaller and more efficient solid state devices. They could have been rejects too. I noticed some variations in their characteristics that may not have been intentional. As for designed obsolescence, I don't think they were intended to fail after X number of hours. Rather they were intended to last at least X number of hours, as a glass half empty or half full. Ordnance equipment was usually held to a higher standard the other equipment.

Leonard

----- Original Message -----
From: Brian Ford kf4tap@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Monday, June 27, 2016 2:53 AM
Subject: Re: [regenrx] More on Vacuum Tube Fuze tubes

Wow Leonard, you racked up? All that for three bucks!

Keith

Sent from Yahoo Mail for iPad

On Sunday, June 26, 2016, 23:12, 'Leonard Meek' lemeek@hawaiiantel.net [regenrx] <regenrx@yahoogroups.com> wrote:

Hue, I don't know how the seller came by them, but at a penny apeice it was too good a deal to pass up. I also got 100 diodes and 100 thyratrons, all proximity stuff, all for a penny apeice.

Leonard

----- Original Message -----
From: "Hubert Miller kargo_cult@... [regenrx]" <regenrx@yahoogroups.com>
To: <regenrx@yahoogroups.com>
Sent: Sunday, June 26, 2016 3:57 PM
Subject: RE: [regenrx] More on Vacuum Tube Fuze tubes

> There had to be a lot left over because the Allies were preparing for
> another year of war. Maybe a lot of it got dumped in the ocean along with
> other surplus.
> -Hue
>
> -----Original Message-----
> From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
> Sent: Sunday, June 26, 2016 6:01 PM
> To: regenrx@yahoogroups.com
> Subject: Re: [regenrx] More on Vacuum Tube Fuze tubes
>

> Hue,
>
> Most probably ended up having "Deadly Encounters of the worst kind" with
> enemy Zeros and ships. Perhaps Uncle Sam destroyed any excess as possibly
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>
> 73 From "The Beaconeer's Lair"
> Phil, KO6BB
> http://www.qsl.net/ko6bb/ (Web Page)
>
>
>
> ------------------------------------
> Posted by: Hubert Miller <kargo_cult@...>
> ------------------------------------
>
> "In the interest of Regenerating radio's lost art of Regeneration"
> ------------------------------------
>
> Yahoo Groups Links
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>

26730. RE: [regenrx] Re: Weskit Bn 1 and United Mitey mite mm3a

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-27 17:49:13 UTC
From: Hubert Miller
Topic: 26714 Message: 26730

If you mean the Space Rambler schematic, this might help you:

http://radioremembered.org/images/WesternRadio/WRBR1.Schematic.JPG

Your reproduction could use something like miniature 7-pin tube plugs for the plug-in coil base.

The original used tiny cardboard coilforms around the diameter of a pencil, rather fragile for any extended use.
Note that there’s no bandspread, which is a serious drawback on the high band at least.

I would change that front panel antenna control, put the trimmer there in parallel with the tuning capacitor,

and either move the antenna trimmer to the rear panel or even outboard. Bandspread control is much more

used in moment-to-moment tuning around.

-Hue

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Monday, June 27, 2016 10:43 AM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Re: Weskit Bn 1 and United Mitey mite mm3a

Hi Mike,

I wish I had the schematic.

That's very cool! Interestingly, the ad claims it's a super-regen. "Order now before the price goes up."

I have a BN-1 and never knew until very recently that Weskit made anything else. The BN-1 seemed so obscure to me that I figured it was a one-off.

73,

John, KC2UAK

Sent from my iPhone

On Jun 27, 2016, at 1:16 PM, 'Michael Bittner' mmab@... <mailto:mmab@...> [regenrx] <regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com> > wrote:

26731. Space Rambler coil deciphered for me

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-27 18:37:26 UTC
From: Hubert Miller
Topic: 26731 Message: 26731

Re the Space Rambler schematic - i don't know about you, but i really didn't like the way the coil plug-in is drawn.
It seems to me it's drawn for my maximum puzzlement.

At risk of boring some, here's what is going on:

Coils A 0.55-1.6 B 1.55-4.2 C 3.75-10.5 MHz

hot (top) end of tuning coil pin 1 - goes to grid of 1L4 and tuning capacitor section C3-1

coil pin 1 is jumpered inside to pin 3 - goes to second section of tuning capacitor C3-2, so that on these bands A B C

the two sections of tuning cap are paralleled

Coil pin 7 goes to ground.

Coil pin 2 feedback winding goes to 1L4 plate

Coil pin 6 feedback winding goes to B+

Coil D 10-22 MHz

does not have jumper connecting pins 1 and 3 inside; otherwise same as above.

So 2nd section of tuning cap C3-2 is not connected, not used. The coil is tuned only by tuning cap section C3-1 to limit the MHz

coverage of this coil.

Coil E 18-42 MHz

hot (grid) end of coil pin 1 goes to 1L4 grid (and tuning cap section C3-1)

other end of tuning coil pin 3 connects to tuning cap section C3-2

coil has a built-in 47 pF cap which connects its pin 3 and pin 2

this capacitor at coil pin 2 connects to 1L4 plate

So the tuned circuit is between plate and grid, with the ground of tuning cap sections C3-1 and C3-2 at ground, "center tap".
For this 18-42 MHz band, the oscillator does not use a feedback winding - it is a Colpitts oscillator

1L4 gets its B+ from a small choke built into the plug-in coil at pin 2. The other end of the choke is coil pin 6 which goes to

B+.

Coil E does not use its pin 7

18-42 MHz on Band E is quite a large swath for not having any bandspread control, which is why i think a front-panel bandspread

would be more useful than an antenna trimmer. Can you imagine trying to tune in 27 MHz CB or 28 MHz ham band with no

bandspead control?

says Hue

26732. RE: [regenrx] More on Vacuum Tube Fuze tubes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-27 18:43:19 UTC
From: Hubert Miller
Topic: 26716 Message: 26732

I’m a believer. Reading about generator turning at 100,000 RPM, fuze timed to 0.5 second, shell sensing altitude so

if it misses a target it still goes off.....a very high degree of precision applied.

-Hue

>Ordnance equipment was usually held to a higher standard the other equipment.

Leonard

26734. Re: [regenrx] TRF to REGEN

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-27 23:47:49 UTC
From: Jim Scott
Topic: 26646 Message: 26734

Weren't the TRF sets more expensive? Even though the circuits were simple, the components were expensive. I would think the addition of additional tuning circuits and additional tube would have added a lot of cost.

If you want to build a TRF receiver, there is a source for the dual gang 365mmf variable at the xtalset society buy/sell page for about $20 US.

www.midnightscience.com

Hope that helps.

73,

Jim Scott
WB0IYC
Life Member ARRL
FISTS 15327
Joplin, MO EM27
http://www.wb0iyc.com

The whole universe is waiting...
http://www.jpl.nasa.gov/

-----Original Message-----
From: Charles Moizeau w2sh@... [regenrx] [mailto:regenrx@yahoogroups.com]
Sent: Sunday, June 26, 2016 08:53 PM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] TRF to REGEN

That certainly makes sense. Just having a tuning knob and a volume control was all you needed to pull in KDKA and, over time, other stations spaced plenty of kilocycles apart from each other.

The high sensitivity and selectivity of the regen weren't needed by plain Jane and ordinary Joe, who wouldn't tolerate that high-pitched audio howl that had to be carefully tamed by a third knob.

Charles

From: regenrx@yahoogroups.com <regenrx@yahoogroups.com> on behalf of Hubert Miller kargo_cult@... [regenrx] <regenrx@yahoogroups.com>
Sent: Sunday, June 26, 2016 2:22 PM
To: regenrx@yahoogroups.com
Subject: RE: [regenrx] TRF to REGEN

I don?t know if anyone answered this or not. The thinking with the TRFs was to give the average non-technical, non-knob tweaker a simple

reliable radio that didn?t require real careful control adjustments like a regen. Part of the evolution toward giving the non-technically interested
a radio with just tuning and volume controls. The tubes used in early radios, triodes, were prone to self oscillation, so circuits were developed
to cancel that.
-Hue

Has anyone put any effort serious or otherwise with making a conversion like this? I've got several Ideas on doing it but want hopefully some comments if anyone wants. After all the big intent of those designs was NOT to make the amplifiers interact with each other. Close to a regen but no cigar. Wonder what the thinking was?

TIM

26735. Re: More on Vacuum Tube Fuze tubes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-27 23:54:56 UTC
From: Randy Randall
Topic: 26716 Message: 26735

Mendelsons in Dayton Ohio had boxes of 100 in their tube room for $2.50 each tube. You got an extreme bargain. Do your tubes have the pinch at the end of the tube where the wires exit in the shape of an "X"? There were no markings on the tubes except a single number like 45, 33, 48 etc.

Randy ab9go

Sent from my iPhone using speech to text technology. Please excuse any grammatical errors or nonsensical text. Siri is a terrible product and Apple should be quite a shamed of it.

26736. Re: [regenrx] Re: More on Vacuum Tube Fuze tubes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-28 04:25:46 UTC
From: Leonard Meek
Topic: 26716 Message: 26736

There's no pinch on the lead end of the tube. The 5 leads come out in a circle. There was supposed to be a red dot or mark for the plate lead but these don't have it. I check for the filament leads first. The grid lead is between them. The other 2 leads are the screen and plate.

I tried the diode in a crystal set but it didn't work as well as a 1N34. The thyratrons will probably not see any use.

Leonard

----- Original Message -----
From: "Randy Randall randy.ab9go@... [regenrx]" <regenrx@yahoogroups.com>
To: <regenrx@yahoogroups.com>
Sent: Monday, June 27, 2016 1:54 PM
Subject: [regenrx] Re: More on Vacuum Tube Fuze tubes

> Mendelsons in Dayton Ohio had boxes of 100 in their tube room for $2.50 each tube. You got an extreme bargain. Do your tubes have the pinch at the end of the tube where the wires exit in the shape of an "X"? There were no markings on the tubes except a single number like 45, 33, 48 etc.
>
>
> Randy ab9go
>
>
> Sent from my iPhone using speech to text technology. Please excuse any grammatical errors or nonsensical text. Siri is a terrible product and Apple should be quite a shamed of it.
>
>
> ------------------------------------
> Posted by: Randy Randall <randy.ab9go@...>
> ------------------------------------
>
> "In the interest of Regenerating radio's lost art of Regeneration"
> ------------------------------------
>
> Yahoo Groups Links
>
>
>
>

26737. RE: [regenrx] Re: More on Vacuum Tube Fuze tubes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-28 04:49:55 UTC
From: Hubert Miller
Topic: 26716 Message: 26737

I was looking at an ad in Electronics Illustrated, Dec. 1960, p 22, for the “Ekeradio FM tuner”;

they say sold from 1947 to the date. The photo shows it with one submini tube. The tube has

a flattened package rather than round, and the whole tube is a solidl grey color. I’m sure it was

a 1.5 volt tube. I’m not real familiar with subminis, so i’m wondering what tube that might be.

As it’s a superregen detector, i think it was a triode. Ideas? I actually have parts of the unbuilt

kit, no tube or instructions.

-Hue Miller ,_._,___

26738. Re: [regenrx] Re: More on Vacuum Tube Fuze tubes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-28 17:13:10 UTC
From: Leonard Meek
Topic: 26716 Message: 26738

Hue, mose of the battery submini tubes I have are the flattened version. That gray coating (on a 1AD4 pentode) is an external sheild and is tied to one of the pins.

Leonard

----- Original Message -----
From: Hubert Miller kargo_cult@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Monday, June 27, 2016 6:49 PM
Subject: RE: [regenrx] Re: More on Vacuum Tube Fuze tubes

I was looking at an ad in Electronics Illustrated, Dec. 1960, p 22, for the “Ekeradio FM tuner”;

they say sold from 1947 to the date. The photo shows it with one submini tube. The tube has

a flattened package rather than round, and the whole tube is a solidl grey color. I’m sure it was

a 1.5 volt tube. I’m not real familiar with subminis, so i’m wondering what tube that might be.

As it’s a superregen detector, i think it was a triode. Ideas? I actually have parts of the unbuilt

kit, no tube or instructions.

-Hue Miller ,_._,___

26739. Re: [regenrx] Re: More on Vacuum Tube Fuze tubes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-28 17:20:47 UTC
From: Leonard Meek
Topic: 26716 Message: 26739

Incidentally, my 433 and 447 tubes are round triodes and are slightly larger than my other subminis, They have the pinch at the bottom with the leads in a straight row. The proximity tubes are slightly bigger than an NE-2 and have a "button" base.

Leonard

----- Original Message -----
From: Hubert Miller kargo_cult@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Monday, June 27, 2016 6:49 PM
Subject: RE: [regenrx] Re: More on Vacuum Tube Fuze tubes

I was looking at an ad in Electronics Illustrated, Dec. 1960, p 22, for the “Ekeradio FM tuner”;

they say sold from 1947 to the date. The photo shows it with one submini tube. The tube has

a flattened package rather than round, and the whole tube is a solidl grey color. I’m sure it was

a 1.5 volt tube. I’m not real familiar with subminis, so i’m wondering what tube that might be.

As it’s a superregen detector, i think it was a triode. Ideas? I actually have parts of the unbuilt

kit, no tube or instructions.

-Hue Miller ,_._,___

26744. RE: [regenrx] Weskit BR-1

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-28 21:56:07 UTC
From: Hubert Miller
Topic: 26740 Message: 26744

That's an interesting guess and it would make sense. The question is that whether the 50% feedback ratio is enough to force it into squegging, =superregeneration.
But i don't recall anything about that in the instructions. Seems like i would have remembered if different procedure was called out for band 18-42 MHz. Maybe not. I don't know where i have the instructions right now.
-Hue

>Sent: Tuesday, June 28, 2016 1:07 PM

Subject: Re: [regenrx] Weskit BR-1
Thanks, Mike. My *guess* is that it's a regen on the lower bands and a super-regen (aka "rush" box) on the highest band. Very clever.

26747. RE: [regenrx] Weskit BR-1

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-29 01:19:50 UTC
From: Hubert Miller
Topic: 26740 Message: 26747

Readers today of such articles as the 1934 Short Wave Craft “Oscillodyne” circuit wonder how such an ordinary Armstrong

regenerative circuit could possibly be called “superregen”. Is it a mistake or maybe hype? When you look at the coil table

for the Oscillodyne (for example), you discover that the feedback winding is much larger than what you usually see. In fact,

for the high frequency band, the tickler winding may have the same, or even more turns than the main, tuned circuit winding.
If you provide massive feedback to the grid, you get periodic blocking action, squegging, and if you control the feedback

level, you can somewhat control the squegging rate. That’s one way to do a self-quenched superregen – probably the

way the phenomenon was discovered. In the BR-1, the 50% feedback tap via the voltage divider of series C3-1 and C3-2

is not enough probably for any kind of superregeneration. So the “superregeneration” term in the advert probably

should have read, “A Super Regenerator!” instead of “Superregenerative!”

-Hue

26748. RE: [regenrx] Weskit BR-1

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-29 01:37:11 UTC
From: Hubert Miller
Topic: 26740 Message: 26748

I have told this story before, but maybe appropriate here: i had a Knight “Space Spanner” back in the mid-1980s. This

has a pretty basic ½ 12AT7 triode Armstrong regenerative. When i was listening on the 6 or 9 MHz band, i discovered

that by increasing the regen way past oscillation point, the thing went into superregenerative mode. For anyone

familiar with superregen sound, it was immediately apparent. Suddenly there was a loud rushing sound between signals;

volume on the same SW broadcast came way up from where it had been at the “optimum (critical) regeneration”

point, and the selectivity, ability to separate two AM HF stations, was 10x as wide. I didn’t investigate why it was able

go into this superregen mode; it wasn’t modified, so i would have to guess either the grid leak resistor increased in value

greatly, setting up a blocking oscillation, or there was something funky about the tube’s characteristics. Even disregarding

the selectivity degradation, it wasn’t an attractive deal: the reception was noisy, and the audio unpleasant. This was the

same judgement i made about the Radio Shack “AM-Shortwave Radio Kit”, the one with the cardboard backboard and

spring clips for connecting wires. It works, but you wouldn’t want to use it for actual listening.

-Hue

26750. RE: [regenrx] Weskit BR-1

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-29 04:25:36 UTC
From: Hubert Miller
Topic: 26740 Message: 26750

Here’s a couple other advertising come-ons that Western Radio considered:

“Order now before the FTC investigates our claims!”

“Order now before we go out of business!”

>Subject: Re: [regenrx] Weskit BR-1

It's what appears to be a split-stator tuning cap that fooled me. I always associate them with super-regens. I thought the marketing hype was "order now before price goes up." Weskit trying to manipulate young minds.

Still, an intriguing little set.

Sent from my iPhone

26751. RE: [regenrx] Weskit BR-1

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-29 15:30:04 UTC
From: dulmagedon@...
Topic: 26740 Message: 26751
Attachments: 1 described; binary payloads are missing from this source WARC

I just built my take on it as some of you already know. i changed a couple of things and used a later tube but I owe the sets design to the original Weskit idea. I made it single tracking with a dual gang tuning cap, one side for the TX and one for the RX. I padded the TX side and aded a low value tuning cap on the RX side for sweeping to find the replying signal . I made the tx a VFO as well. I switched to hartley based circuits because i prefer them . I made both tx and rx coils identical and on slug tuned ceramic coil forms. I link coupled the antenna to each coil and switch it from TX to Rx as well as B+. i did not switch the heaters as the old Weskit did. After a successsfull fore up i added a Audio amp which was an option back in the day on some BN-1 sets. I could have got by without it s I could hear well enough but I had 12aq5 and a socket and a half dozen parts so i did it. The RX is absolutely phenomenal. I can hardly believe so few parts can work so well. Probably the most signal sensitive rx I own bare none. I have been playing with it everyday since for a few hours. My main dual triode I settled on fnally ws an ECC832 which is essentally 1/2 12ax7 (for the regen) and 1/2 12au7 (for the transmitter) I was ble to run the set on AC based power with no decernble hum when I finally finised it. here is the business end when it was first finished. I call it the DN-1. Fun to use and performs well. I would have said more earlier but just got home from NL so I missed the start. However I built mine this month so it is still fresh.
donVe3LYX

26752. RE: [regenrx] Weskit BR-1

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-29 17:51:32 UTC
From: Hubert Miller
Topic: 26740 Message: 26752

Don, what bands are you using this on?
What does the transmitter sound like on the air?

Congrats on coming up with a clever little rig. I like the name too.

-Hue

>Subject: RE: [regenrx] Weskit BR-1 [1 Attachment]

I just built my take on it as some of you already know. i changed a couple of things and used a later tube but I owe the sets design to the original Weskit idea. I made it single tracking with a dual gang tuning cap, one side for the TX and one for the RX. I padded the TX side and aded a low value tuning cap on the RX side for sweeping to find the replying signal . I made the tx a VFO as well. I switched to hartley based circuits because i prefer them . I made both tx andc rx coils identical and on slug tuned ceramic coil forms. I link coupled the antenna to each coil and switch it from TX to Rx as well as B+. i did not switch the heaters as the old Weskit did. After a successsfull fore up i added a Audio amp which was an option back in the day on some BN-1 sets. I could have got by without it I could hear well enough but I had 12aq5 and a socket and a half dozen parts so i did it. The RX is absolutely phenomenal. I can hardly believe so few parts can work so well. Probably the most signal sensitive rx I own bare none. I have been playing with it everyday since for a few hours. My main dual triode I settled on fnally ws an ECC832 which is essentally 1/2 12ax7 (for the regen) and 1/2 12au7 (for the transmitter) I was ble to run the set on AC based power with no decernble hum when I finally finised it. here is the business end when it was first finished. I call it the DN-1. Fun to use and performs well. I would have said more earlier but just got home from NL so I missed the start. However I built mine this month so it is still fresh.

26753. RE: [regenrx] Weskit BR-1

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-29 18:55:55 UTC
From: dulmagedon@...
Topic: 26740 Message: 26753

I built it for 40M and it will do 60M but I am rarely there so probably doesn't matter. It sound pretty decent to me. It is a little wobbly when cold but after about 15 minutes it is solid. It hs its own tone but it is not wild or anything. Input is around 6 watts (current measured across the key with cathode keying) Output is good but in all honesty it could probably use more however I have other rigs with less power that do fine on vintage nights so it should be OK. I havent had any contacts yet as everyone seems to busy to listen so i have been calling on and around 7040khz when I have time and it isnt occupied. I am tooo far from any skimmers to use a RBN as even my big rig has only run their bell twice that i know of. I have 45 watt rig standing by on the same freq which I fire up and try as well. Since neither is getting a reply the week before i went and last night I figure it isnt the rig so much as conditions and lack of activity. I also know that I and most other hams naturaly go back to the best signal we hear so a pipsqueak like this compared to a 100 watt Kenwood or Yaseau for instance has a tuff go. Unless of course someone is listening for it. So that is kind off frustrating because I did some field testing and SS testing nearby and i know it is a good as any of my vintage transmitters and better then some. Hopefully I will work someone soon. On the other hand the rx surpised me. Even with only the one triode section i could copy it seemed everything my DX394 can. Once i dded the 12aq5 audio amp and found its sweet spot (too much gain gives hum like any good amp but around 1/2 throttle there is none that I can hear) I can tune my Dx394 to a freq, give it its final tweak and max signal , tune the DN-1 to the same spot and hear the same. Then with about an extra 1.8th turn on the regen control (a 250k pot) step into signals the Dx394 can not hear. That surprises me and the parts count and complication of circuit design is quite low. I just love how the little thing works and even though I have only had a week and a bit of running it it is fun to use and I find myself turning it on everytime I am in my vintage shack. In fact I am on way downstairs now. It will run a speaker too although I prefer phones. I find myself grinning as I use it. Once i get a contact then I will be very happy. Range judging on past experience at similar power levels on the same antenna will be 60 to 200 miles so someone far side or Syracuse NY or London Ontario for instance would probably be good to go in current conditions and time of year. I am on the North Shore of Lake Ontario a bit east of centre.
Anyway I hope more of you built it or your take on it. I am enjoying mine. More then I expected to truth be known.
donVe3LYX

26754. Re: [regenrx] FAUX BURGESS batteries I still have a 1,000 of the red shield cards to glue onto them

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-29 21:03:35 UTC
From: dubtub88@...
Topic: 26507 Message: 26754

Rob,

Missed the conversation on the battery labels. What do I do to get some?
THANKS

TIM

26755. Re: [regenrx] FAUX BURGESS batteries I still have a 1,000 of the red shield cards to glue onto them

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-30 01:33:00 UTC
From: Rob
Topic: 26507 Message: 26755

Give me your mailing address and I will toss a pile of them into the mail.
Please post pictures if you ever build anything with them.

On 06/29/2016 05:03 PM, dubtub88@... [regenrx] wrote:
>
> Rob,
>
>
> Missed the conversation on the battery labels. What do I do to get some?
> THANKS
>
> TIM
>

26756. Re: [regenrx] FAUX BURGESS batteries I still have a 1,000 of the red shield cards to glue onto them

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-30 04:15:03 UTC
From: Leonard Meek
Topic: 26507 Message: 26756
Attachments: 1 described; binary payloads are missing from this source WARC

Rob, here's a couple of Burgess wanabes I built.

----- Original Message -----
From: Rob roomberg@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Wednesday, June 29, 2016 3:33 PM
Subject: Re: [regenrx] FAUX BURGESS batteries I still have a 1,000 of the red shield cards to glue onto them

Give me your mailing address and I will toss a pile of them into the mail.
Please post pictures if you ever build anything with them.

On 06/29/2016 05:03 PM, dubtub88@... [regenrx] wrote:

Rob,

Missed the conversation on the battery labels. What do I do to get some?
THANKS

TIM

26757. Re: [regenrx] FAUX BURGESS batteries the gold standard

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-30 05:58:09 UTC
From: Rob
Topic: 26507 Message: 26757
Attachments: 1 described; binary payloads are missing from this source WARC

Well done Leonard.
I've been thinking of your batteries as the gold standard of how to make reproduction batteries.

On 06/30/2016 12:15 AM, 'Leonard Meek' lemeek@... [regenrx]
wrote:
>
> □
>
> Rob, here's a couple of Burgess wanabes I built.
>
> ----- Original Message -----
> *From:* Rob roomberg@... [regenrx]
> <mailto:roomberg@...%20[regenrx]>
> *To:* regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>
> *Sent:* Wednesday, June 29, 2016 3:33 PM
> *Subject:* Re: [regenrx] FAUX BURGESS batteries I still have a
> 1,000 of the red shield cards to glue onto them
>
> Give me your mailing address and I will toss a pile of them into
> the mail.
> Please post pictures if you ever build anything with them.
>
>
>
>
> On 06/29/2016 05:03 PM, dubtub88@... [regenrx] wrote:
>>
>> Rob,
>>
>>
>> Missed the conversation on the battery labels. What do I do to
>> get some?
>> THANKS
>>
>> TIM
>
> _

26758. Which way does this capacitor go..... INTERstage coupling

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-30 06:20:44 UTC
From: Rob
Topic: 26666 Message: 26758

I am not getting any audio out of the complete TDA7052 amp circuit using
a 10uF electrolytic cap.
It humps the speaker with a solid click.... then periodically humps the
speaker again.
I did not take note that it was a cyclic event until I replaced the 10uF
cap with a 1uF electrolytic
and then I got non-stop pop pop pop pop pop pop pop.

I built the amp circuit twice.... first with wire wrap..... then on
modern breadboard.
Getting the exact same results. pop pop pop pop pop pop

I listened to the original radio circuit when attached to a small
portable guitar amplifier.
I do not know the circuit in the guitar amp but it raises my curiosity
as to how interstage
connections are made between the guitar amp input and its amplifier and
what I might be needing to be an interstage connection between my 7.16
circuit
and my MPF102/TDA7052 circuit.
I have suspicions that my 7.16 circuit is passing so much DC into the
MPF102 circuit that
it just plows the speaker to solid humped "on".
Is a choke in order someplace here?

On 06/25/2016 04:21 PM, Jim Simmons orion@... [regenrx] wrote:
>
> Rob,
>
> Just go ahead and use the 1uF electrolytic, if that's what you have.
> Connect the positive (+) end to the drain of the MPF102, and the
> negative (-) end to the TDA7052. This should work fine business. BTW,
> it doesn't even have to be a 1uF capacitor. I would venture that if
> it's value is much higher (like 10 - 20uF) your circuit would work for
> the purpose intended.
>
> Jim ~ N5MSJ
>
>
> On 6/25/2016 3:55 AM, Rob roomberg@... [regenrx] wrote:
>>
>> I'm building an audio amplifier for the 7.16 regen circuit.
>> http://www.learnmorsecode.com/716/716.html
>>

>> I found a circuit on the web that uses an MPF102 pre-amp and a TDA7052
>> amplifier chip:
>>
>> I put it here to share it:
>> http://www.learnmorsecode.com/amp/1w_Punch_amp_schematic_MPF102andTDA7052.jpg
>>
>> The circuit says C1 is 1u
>> which I assume is 1uF
>> an does not show a + symbol or curve so I would think that capacitor
>> is not
>> a polarized electrolytic.
>> So what IS it?
>> I have no 1uF capacitors here that are not polarized electrolytic so I'm
>> sort of stumped.
>> Can I use my electrolytic 1uF cap or must this C1 NOT be an electrolytic?
>>
>> Which way is the correct way to point a 1uF electrolytic cap?
>> I found multiple amplifier schematics on the web that use this
>> TDA7052 chip
>> that show that capacitor as 1uF and 2.2uF and points with the + toward
>> the TDA7052 input pin
>> and another schematic with the + pointing away from the input pin.
>>
>

26759. Re: [regenrx] Which way does this capacitor go..... INTERstage coupling

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-30 06:30:01 UTC
From: Cecil Bayona
Topic: 26666 Message: 26759

The pop, pop, pop might be motorboating, that is usually cause by an
insufficiently bypassed power supply, or not enough power.

On 6/30/2016 1:20 AM, Rob roomberg@... [regenrx] wrote:
>
> I am not getting any audio out of the complete TDA7052 amp circuit
> using a 10uF electrolytic cap.
> It humps the speaker with a solid click.... then periodically humps
> the speaker again.
> I did not take note that it was a cyclic event until I replaced the
> 10uF cap with a 1uF electrolytic
> and then I got non-stop pop pop pop pop pop pop pop.
>
> I built the amp circuit twice.... first with wire wrap..... then on
> modern breadboard.
> Getting the exact same results. pop pop pop pop pop pop
>
>
> I listened to the original radio circuit when attached to a small
> portable guitar amplifier.
> I do not know the circuit in the guitar amp but it raises my curiosity
> as to how interstage
> connections are made between the guitar amp input and its amplifier and
> what I might be needing to be an interstage connection between my 7.16
> circuit
> and my MPF102/TDA7052 circuit.
> I have suspicions that my 7.16 circuit is passing so much DC into
> the MPF102 circuit that
> it just plows the speaker to solid humped "on".
> Is a choke in order someplace here?
>
>
>
>
> On 06/25/2016 04:21 PM, Jim Simmons orion@... [regenrx] wrote:
>>
>> Rob,
>>
>> Just go ahead and use the 1uF electrolytic, if that's what you have.
>> Connect the positive (+) end to the drain of the MPF102, and the
>> negative (-) end to the TDA7052. This should work fine business.
>> BTW, it doesn't even have to be a 1uF capacitor. I would venture
>> that if it's value is much higher (like 10 - 20uF) your circuit would
>> work for the purpose intended.
>>

>> Jim ~ N5MSJ
>>
>>
>> On 6/25/2016 3:55 AM, Rob roomberg@... [regenrx] wrote:
>>>
>>> I'm building an audio amplifier for the 7.16 regen circuit.
>>> http://www.learnmorsecode.com/716/716.html
>>>
>
>
>
>
>
>>> I found a circuit on the web that uses an MPF102 pre-amp and a TDA7052
>>> amplifier chip:
>>>
>>> I put it here to share it:
>>> http://www.learnmorsecode.com/amp/1w_Punch_amp_schematic_MPF102andTDA7052.jpg
>>>
>>> The circuit says C1 is 1u
>>> which I assume is 1uF
>>> an does not show a + symbol or curve so I would think that capacitor
>>> is not
>>> a polarized electrolytic.
>>> So what IS it?
>>> I have no 1uF capacitors here that are not polarized electrolytic so
>>> I'm
>>> sort of stumped.
>>> Can I use my electrolytic 1uF cap or must this C1 NOT be an
>>> electrolytic?
>>>
>>> Which way is the correct way to point a 1uF electrolytic cap?
>>> I found multiple amplifier schematics on the web that use this
>>> TDA7052 chip
>>> that show that capacitor as 1uF and 2.2uF and points with the + toward
>>> the TDA7052 input pin
>>> and another schematic with the + pointing away from the input pin.
>>>
>>
>
>

--
Cecil - k5nwa
http://thepartsplace.k5nwa.com/

26760. labels

Yahoo group: regenrx (2016 — 2017)
Date: 2016-06-30 21:05:24 UTC
From: noniepapa
Topic: 26760 Message: 26760

Hello Rob, would it be possible for you to send a few labels to me also ??my addr. is Pat Gardner K8ZXW

12581 Retreat Dr.

Grand Haven, Mi. 49417

Thanks and 73's....Pat

26761. Re: Transceiver build with regen completed

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-04 11:21:56 UTC
From: dulmagedon@...
Topic: 26581 Message: 26761

Well while you lads have been postulating about the Weskit BN-1 etc I took a week off from working on my take on it and went to Holland for holiday. Now that i have returned I spent sometime optimizing best I could the transmitter output. Yesterday at 8 AM I did a QSO with Paul N1BUG on 7040khz. I received a 449 report and we pulled it of despite some QSB and heavy QRM near me. You might not be impressed but I was. S much so that my hand was shaking as I signed and I could hardly send Paul's call. That is 423 miles ATCF in less then optimum conditions . When you consider it is only 1/2 a tube so only single triode that comprises the whole transmitter I am impressed. The receiver continues to amaze me as well. Seems to work very well. As I mentioned I added a 12aQ audio amp but it did function to a usable level without it. The whole project turned out much better then i would have thought. That doesn't often happen. After working Paul I set it aside on the shelf till winter and real good conditions content in the knowledge I have a real good working transceiver for very few dollars and a lot of fun. If the original BN-1 works half as good then it is a heck of a radio.
BTW have already thought of modulating it. There are many ways to do it that work well and I have explored several over the years. Some dating as far back as pre 1920. Plate modulation isn't the only game in town. In fact it is rarely used commercialy.

26762. RE: [regenrx] Re: Transceiver build with regen completed

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-05 04:23:15 UTC
From: Hubert Miller
Topic: 26581 Message: 26762

What is the tuning range of your transceiver?
I think the 4 - 5 MHZ per turn of the original BN-1 tuning range would have made it very hard to use for DX.
What B+ did you use on the transmit section of the 3A5 valve?
tnx
-Hue Miller

>Well while you lads have been postulating about the Weskit BN-1 etc I took a week off from working on my take on it and went to Holland for holiday. Now that i have returned I spent sometime optimizing best I could the transmitter output.....

26763. FS: Morrow HF Converter

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-05 12:30:41 UTC
From: Bry Carling
Topic: 26763 Message: 26763

FOR SALE: Morrow HF Mobile converter

Covers 80m, 40m, 20m, 15m and 10m

Lovely old nostalgia piece. It will convert these HF bands to appear on the AM (medium wave)
Band in your car radio - or other AM band receiver.

Pictures and details at:

http://af4k.com/radios.htm

Available for $50.00 plus shipping.

73 - Bry, AF4K

26764. RE: [regenrx] Re: Transceiver build with regen completed

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-05 12:33:47 UTC
From: dulmagedon@...
Topic: 26581 Message: 26764

6.9 to 10.4mhz
I thought about padding it to tune 3.5 to 7.3 at least but it works so well I am not going to monkey with it.
Remember I did not build the BN-1 but my take on it.
So the main tuning tunes the ganged dual tuning cap which I robbed from an old receiver. Yes it is a bit fast especially on tranmit but still workable. It has a reduction but I wish it had more still it is very usable. If you want to work me on any freq it covers I will be there , right there. On Receive I added a bandspread cap so I can swing and find the signal. It has some gear reduction too but probably doesnt really need it. You need RIT so you can find the signal because as you know often even on modern rigs we re not always exactly on freq with the other station. This feature allows you to operate without touchng tx tune. I have this on my other transceiver, my first one and it came about after discovering I needed it so it is now part of how I build transceivers. So running the rx is not difficult at all and its performance surprises me. I built both circuits as I said before as hartleys (RX TX) . My TX is VFO not crystal. With crystal control it is a non issue.
I did not use the 3a5 as I didnt have one. I built it originally with a 12ax7 because I have several of them. They are a bit light on power being akin to a 12sl7 so I popped in a 12au7. The TX liked it but the regen behaved like a regen does with a 6sn7 (or 12sn7) Meaning it worked but not as lively. I said to my self it would be nice to have a tube that was half 12ax7 and half 12au7. I was poking around on some tube sites and came across the ECC832 which is exactly that. I found one from my favourite tube store and luckily its power side was where my set was wired for the TX and its voltage amp side was where my rx was wired so it was a plug in. (I am not usually that lucky) Instantly it picked up and worked as I had hoped. Actually far better then i had hoped. The Rx gives nothing away and I am thrilled with it. The TX was now drawing 6 watts and lighting my RF sniffer bulb so I knew it had enough power to communicate. Output wasnt as high as I wanted but enough. I played with the output link using a Christmas tree bulb to indicate actual RF out and revamped its position and number of turns to get good output. I installed a guset op in my chair and had them send some CW while I took a portable a few miles away to compare reception against my other homebrew single tube rigs . It was as good as the best and well above most . Voltage is 282v key down BTW.(A 3A5 doesn't need that much) Regen side runs on much less of course. So the set is putting out but no contacts. I have been there before. Often the weaker signals get ignored. I know because I do that myself. And it doesn't have that solid modern sound to it so newer hams get nervous. it has a slight chirp but slight not pronounced but still it sounds different. Summer activity is often spotty anyway so I tried to get a volunteer to listen for it. Seemed like it wasn't going to happen but Paul saw my post on a nearby sight asking and was there in minutes. He is an exceptional operator and has been in the same spot with some of his homebrew vintage rigs so understood immediately. I have never been in a vintage radio event that he hasn't worked me. He won the AWA BK event 2014 so you know he is good.
However he said he heard me from my initial CQ and gave me a 449. He is a long ways away for a small rig to hear in daytime. I had figured maybe some one in New York State (Syracuse area) would be about the limit for daytime ops so I am more then thrilled. He is more then double that from me. (423miles ATCF)

What I learned from the BN-1 which I took to designing this one was use each triode section independently. (one side for tx one side for RX) I hadn't thought of that simple a design before.
So using the concept they used I designed one that suited my junk box and experience. however if I had a BN-1 it would be on air in an instant. A single tube practical transceiver is a pretty pratical device. For clandestine WW11 radios it would have been perfect. I hate over-complication or should I say unnecessary complication of simple circuits so when something like this comes together and works so well I am very pleased to say the least. I intend to use it regularly.
donVe3LYX

26765. My next project...a twinplex?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-06 15:00:54 UTC
From: kc2siz@...
Topic: 26765 Message: 26765

I've built several regens, both solid and hollow state. They all worked, some better than others, but none of them have done as good a job as I'd like at demodulating SSB signals. I'd really like to remedy this.

A friend of mine recommended that I build a twinplex for this purpose. Are there any other circuits you'd suggest? I don't care whether it uses tubes or transistors so long as it's a strong performer on SSB.

Steve

26766. Re: My next project...a twinplex?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-06 16:05:52 UTC
From: dulmagedon@...
Topic: 26765 Message: 26766

The twinplex is a very good design. Probably one of the best. Keep the freq range low to your area of interest. I am moore then happy with mine and have used it and not been tempted to modify it for many years. (Probably 20 plus.)
I recently built a hartley based one which also works exceptionally well but I do not wish to muddy the waters as the twinplex with a 6sl7 or 12sl7 is more then up to the job. Just go for it.
donVe3LYX

26767. Re: [regenrx] My next project...a twinplex?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-06 17:30:56 UTC
From: Brian Ford
Topic: 26765 Message: 26767

blockquote, div.yahoo_quoted { margin-left: 0 !important; border-left:1px #715FFA solid !important; padding-left:1ex !important; background-color:white !important; } Have you selected a circuit yet?
Keith

Sent from Yahoo Mail for iPad

On Wednesday, July 6, 2016, 10:00, kc2siz@gmail.com [regenrx] <regenrx@yahoogroups.com> wrote:

I've built several regens, both solid and hollow state. They all worked, some better than others, but none of them have done as good a job as I'd like at demodulating SSB signals. I'd really like to remedy this.

A friend of mine recommended that I build a twinplex for this purpose. Are there any other circuits you'd suggest? I don't care whether it uses tubes or transistors so long as it's a strong performer on SSB.

Steve
-- #ygrp-mkp {border:1px solid #d8d8d8;font-family:Arial;margin:10px 0;padding:0 10px;}#ygrp-mkp hr {border:1px solid #d8d8d8;}#ygrp-mkp #hd {color:#628c2a;font-size:85%;font-weight:700;line-height:122%;margin:10px 0;}#ygrp-mkp #ads {margin-bottom:10px;}#ygrp-mkp .ad {padding:0 0;}#ygrp-mkp .ad p {margin:0;}#ygrp-mkp .ad a {color:#0000ff;text-decoration:none;}#ygrp-sponsor #ygrp-lc {font-family:Arial;}#ygrp-sponsor #ygrp-lc #hd {margin:10px 0px;font-weight:700;font-size:78%;line-height:122%;}#ygrp-sponsor #ygrp-lc .ad {margin-bottom:10px;padding:0 0;}#actions {font-family:Verdana;font-size:11px;padding:10px 0;}#activity {background-color:#e0ecee;float:left;font-family:Verdana;font-size:10px;padding:10px;}#activity span {font-weight:700;}#activity span:first-child {text-transform:uppercase;}#activity span a {color:#5085b6;text-decoration:none;}#activity span span {color:#ff7900;}#activity span .underline {text-decoration:underline;}.attach {clear:both;display:table;font-family:Arial;font-size:12px;padding:10px 0;width:400px;}.attach div a {text-decoration:none;}.attach img {border:none;padding-right:5px;}.attach label {display:block;margin-bottom:5px;}.attach label a {text-decoration:none;}blockquote {margin:0 0 0 4px;}.bold {font-family:Arial;font-size:13px;font-weight:700;}.bold a {text-decoration:none;}dd.last p a {font-family:Verdana;font-weight:700;}dd.last p span {margin-right:10px;font-family:Verdana;font-weight:700;}dd.last p span.yshortcuts {margin-right:0;}div.attach-table div div a {text-decoration:none;}div.attach-table {width:400px;}div.file-title a, div.file-title a:active, div.file-title a:hover, div.file-title a:visited {text-decoration:none;}div.photo-title a, div.photo-title a:active, div.photo-title a:hover, div.photo-title a:visited {text-decoration:none;}div#ygrp-mlmsg #ygrp-msg p a span.yshortcuts {font-family:Verdana;font-size:10px;font-weight:normal;}.green {color:#628c2a;}.MsoNormal {margin:0 0 0 0;}o {font-size:0;}#photos div {float:left;width:72px;}#photos div div {border:1px solid #666666;min-height:62px;overflow:hidden;width:62px;}#photos div label {c

olor:#666666;font-size:10px;overflow:hidden;text-align:center;white-space:nowrap;width:64px;}#reco-category {font-size:77%;}#reco-desc {font-size:77%;}.replbq {margin:4px;}#ygrp-actbar div a:first-child {margin-right:2px;padding-right:5px;}#ygrp-mlmsg {font-size:13px;font-family:Arial, helvetica, clean, sans-serif;}#ygrp-mlmsg table {font-size:inherit;font:100%;}#ygrp-mlmsg select, input, textarea {font:99% Arial, Helvetica, clean, sans-serif;}#ygrp-mlmsg pre, code {font:115% monospace;}#ygrp-mlmsg * {line-height:1.22em;}#ygrp-mlmsg #logo {padding-bottom:10px;}#ygrp-msg p a {font-family:Verdana;}#ygrp-msg p#attach-count span {color:#1E66AE;font-weight:700;}#ygrp-reco #reco-head {color:#ff7900;font-weight:700;}#ygrp-reco {margin-bottom:20px;padding:0px;}#ygrp-sponsor #ov li a {font-size:130%;text-decoration:none;}#ygrp-sponsor #ov li {font-size:77%;list-style-type:square;padding:6px 0;}#ygrp-sponsor #ov ul {margin:0;padding:0 0 0 8px;}#ygrp-text {font-family:Georgia;}#ygrp-text p {margin:0 0 1em 0;}#ygrp-text tt {font-size:120%;}#ygrp-vital ul li:last-child {border-right:none !important;}

26768. Re: My next project...a twinplex?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-06 19:30:41 UTC
From: kc2siz@...
Topic: 26765 Message: 26768

I'm leaning toward the twinplex, but I want it to be able to power a speaker and my understanding is that the bare bones twinplex circuit is really best for headphones.

26769. Re: [regenrx] Re: My next project...a twinplex?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-06 20:11:27 UTC
From: J Ed
Topic: 26765 Message: 26769

Nothing says you couldn't use a choke in the lead of the second triode and then have a line out to a power amplifier. A small tube such as 6AQ5 or something would do. I have a 12A6 if you're looking for a more retro look (12A6 is an octal tube in a metal shell).

Ed AE7TE
On Jul 6, 2016 12:30 PM, "kc2siz@... [regenrx]" <
regenrx@yahoogroups.com> wrote:

>
>
> I'm leaning toward the twinplex, but I want it to be able to power a
> speaker and my understanding is that the bare bones twinplex circuit is
> really best for headphones.
>
>

26770. Re: [regenrx] My next project...a twinplex?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-06 22:03:03 UTC
From: Doug Hancock
Topic: 26765 Message: 26770

The twinplex will be just as bad on SSB as the rest of them unless you use very light tank coupling. Just enough to get good oscillation. If you want a solid SSB performer, check out a solid state regen I built a few months back.
http://www.theradioboard.com/rb/viewtopic.php?f=4&t=6891

On Wednesday, July 6, 2016 10:01 AM, "kc2siz@... [regenrx]" <regenrx@yahoogroups.com> wrote:

  I've built several regens, both solid and hollow state. They all worked, some better than others, but none of them have done as good a job as I'd like at demodulating SSB signals. I'd really like to remedy this.
A friend of mine recommended that I build a twinplex for this purpose. Are there any other circuits you'd suggest? I don't care whether it uses tubes or transistors so long as it's a strong performer on SSB.
Steve

26771. RE: [regenrx] My next project...a twinplex?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-06 23:30:40 UTC
From: Hubert Miller
Topic: 26765 Message: 26771

I looked up the discussion of the two transistor regen on Radioboard. I just registered also; i hope i make the grade!

While looking there, i noticed a mention of a recent ‘crystal set field day’ in Beijing.

http://www.crystalradio.cn/thread-873197-1-1.html

Nice photos! Radio fun is international!

BTW, the article has me thinking of making some plug-in solidstate adapters for the National SW-3. It seems that

a high voltage power supply is always a stumbling block for me.

Also the mention of the FT-101 dial + tuning cap the regen builder used, reminded of a very dirty TS-511 transceiver

i bought – without the HV matching power supply. I had been wondering whether it deserves to be restored, or just

too much work for a project with not much to recommend it?

-Hue Miller

26772. Re: My next project...a twinplex?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-07 03:00:33 UTC
From: kc2siz@...
Topic: 26765 Message: 26772

Very interesting. It sounds great! I will definitely study the schematic.

Steve

26773. Re: [regenrx] My next project...a twinplex?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-07 08:50:00 UTC
From: dulmagedon@...
Topic: 26765 Message: 26773

Now hold on a dang minute! The twinplex will copy SOLID SSB.all day long. I know because i have and use one regularly. I often sit here and read the mail in the SSB portion just for something to do while I am waiting for a sked . If you dont build a twinplex you will never know how well they work. Once you have one it is easy to understand why they were so popular. In fact many of the more exotic designs using beam power tubes etc are pure crap in comparison. (yes I have built and tried them)
I am also quite partial to hartley based regen including the one I just built for my transceiver. it copies SSB easily with out a fuss and willl run a speaker by the way although I prefer phones. However that said a well built regen of the twinplex design will give you a very practical and usable receiver that will give nothing away to your modern rxs. 6sl7 or 12sl7 are my favourites as they are very responsive compared to the N tubes. When using my single tube TX I always pair it with its matching twinplex. And I use a loop antenna on mine. A 10 inch loop sitting in the window. That is all it wants or needs.
donVE3LYX

26774. Re: My next project...a twinplex?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-07 12:59:41 UTC
From: les.au49@...
Topic: 26765 Message: 26774

Hello Steve, Regarding SSB, was your design that didn't resolve SSB "low-C" or "high-C"? According to Dave Newkirk, tank circuits where the circulating capacitance has an impedance of 100 to 150 ohms do not "pull" readily. Consequently they resolve SSB reliably. Trust me, Dave Newkirk knows what he's talking about on this point.

Beyond this, when you write about resolving SSB your set must have a tuning rate of 25 to 100kHz per rotation of the tuning knob. Oh yes, you CAN resolve SSB on a set with a high tuning rate, but not so easily.

Finally, your set must be stable, so it MUST be constructed rigidly - solid front panel, rigidly mounted capacitor of good quality and so on.

Whatever circuit you choose, unless you follow the formula above, your set will not perform well. Finally, the real king of regen set construction, James Millen, experimented with various circuits and configurations for about 12 months. At the end he concluded that the circuit wasn't as important as attention to good quality components AND solid mechanical construction.

Finally, among the files for this group, in a folder called "Trawling_RegenRx" you'll find a file (a text file) about the twinplex. This is a collection about observations made here, on RegenRx, about the twinplex receiver. That, I hope, will be a useful source of info for you.

Les

26775. trf receiver adress

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-07 15:25:24 UTC
From: husnu66tr@...
Topic: 26775 Message: 26775

Index of /h/u/husnu66tr/receivers http://www.geocities.ws/husnu66tr/receivers

http://www.geocities.ws/husnu66tr/receivers

Index of /h/u/husnu66tr/receivers http://www.geocities.ws/husnu66tr/receivers Name Last modified Size Description Parent Directory - Crystal-fm-set2.htm 2013-04-12 13:19 7.2K Husnu145.htm 2013-04-14 16:36 6.6K LW-MW-receiv...

View on www.geocities.ws http://www.geocities.ws/husnu66tr/receivers
Preview by Yahoo

26776. FS: Extra extra nice Heathkit GD-1B Grid Dip Meter.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-07 19:38:14 UTC
From: Bry Carling
Topic: 26776 Message: 26776

FOR SALE: I have an extra nice Heathkit GD-1B Grid Dip Meter.
Looks better than any I have seen. This was from an estate and it works perfectly.

Comes with the original box of coils containing all the coils plus two extra coils.
The AC cable is in excellent condition and the GDO is fully working.
This was obviously looked after very carefully; 100% clean and no scratches or dents.

Available for $65.00 plus shipping.

(I also have a really nice Millen GDO complete with box etc., for $95.00)

Pictures and details at:
http://af4k.com/testgear.htm

73 - Bry Carling, AF4K

26777. Re: 1951 Novice Receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-07 20:24:55 UTC
From: rhulett1@...
Topic: 24375 Message: 26777

Used the 1951 Novice receiver today. It has two tubes, 12sj7 and 12sl7. I changed to 12 voltage heaters so could use my 13.8 V PS. Using 7x9VDC series for plate supply.

I had built one of these about 50 years ago, don't recall the behavior experienced with this one. The regeneration control interacts with the tuning capacitors. The antenna tuner capacitor interacts with all three. I am using a "band set" and band spread capacitor driven through a vernier.

Am not recalling all these interactions, but maybe that's just my poor memory. I would appreciate any advice or observations.

My next project is a "Bayou Jumper" regen, hoping there are fewer interactions with it.

73, Curt KB5JO

26778. FS: Heathkit MM1 Multimeter

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-07 21:01:46 UTC
From: Bry Carling
Topic: 26778 Message: 26778

FOR SALE:

Heathkit MM-1 Analog Multimeter in very good condition, no test leads included.

Will sell for $25.00 plus shipping.

Pictures available on request...

Regards - Brian "Bry" Carling, AF4K

26779. Re: [regenrx] Re: My next project...a twinplex?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-08 01:47:57 UTC
From: Doug Hancock
Topic: 26765 Message: 26779

Very good idea with the hi-C tank, and I would like to try it and see how it works. The ability for a one device detector to receive SSB without distorting or warbling on the stronger signals seems to come from inter-electrode capacitance changes that can influence the tank circuit. Any design that minimizes this will make copying SSB that much more enjoyable.

On Thursday, July 7, 2016 7:59 AM, "les.au49@... [regenrx]" <regenrx@yahoogroups.com> wrote:

Hello Steve, Regarding SSB, was your design that didn't resolve SSB "low-C" or "high-C"? According to Dave Newkirk, tank circuits where the circulating capacitance has an impedance of 100 to 150 ohms do not "pull" readily. Consequently they resolve SSB reliably. Trust me, Dave Newkirk knows what he's talking about on this point.

Beyond this, when you write about resolving SSB your set must have a tuning rate of 25 to 100kHz per rotation of the tuning knob. Oh yes, you CAN resolve SSB on a set with a high tuning rate, but not so easily.

Finally, your set must be stable, so it MUST be constructed rigidly - solid front panel, rigidly mounted capacitor of good quality and so on.

Whatever circuit you choose, unless you follow the formula above, your set will not perform well. Finally, the real king of regen set construction, James Millen, experimented with various circuits and configurations for about 12 months. At the end he concluded that the circuit wasn't as important as attention to good quality components AND solid mechanical construction.

Finally, among the files for this group, in a folder called "Trawling_RegenRx" you'll find a file (a text file) about the twinplex. This is a collection about observations made here, on RegenRx, about the twinplex receiver. That, I hope, will be a useful source of info for you.

Les

26780. SOLD: Heathkit MM1 Multimeter

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-08 02:47:05 UTC
From: Bry Carling
Topic: 26778 Message: 26780

The Heathkit meter is sold. Thank you to all who inquired.
73 - Bry, AF4K

http://af4k.com/testgear.htm

To: dcboatanchors@...; tampabaytradersnet@yahoogroups.com; regenrx@yahoogroups.com
From: TampaBayTradersNet@yahoogroups.com
Date: Thu, 7 Jul 2016 17:01:46 -0400
Subject: [TampaBayTradersNet] FS: Heathkit MM1 Multimeter

FOR SALE:

Heathkit MM-1 Analog Multimeter in very good condition, no test leads included.

Will sell for $25.00 plus shipping.

Pictures available on request...

Regards - Brian "Bry" Carling, AF4K

26781. 716 regen heard Spain

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-08 06:54:34 UTC
From: Rob
Topic: 26666 Message: 26781

Sort of like a kid on Christmas morning.
This stuff never ceases to amaze me.

I heard EA5FX and KG0RD on this project board radio tonight:
http://www.learnmorsecode.com/716/716.html

I'm in PA so EA5FX is 3,850 miles east of me and
KG0RD is 1,056 miles west of me.

I am still using the outboard mini guitar amplifier.
Definitely have not debugged the failing TDA7052 circuit.

On 06/25/2016 04:55 AM, Rob roomberg@... [regenrx] wrote:
>
> I'm building an audio amplifier for the 7.16 regen circuit.
>
> I found a circuit on the web that uses an MPF102 pre-amp and a TDA7052
> amplifier chip:
>
> I put it here to share it:
> http://www.learnmorsecode.com/amp/1w_Punch_amp_schematic_MPF102andTDA7052.jpg
>

26782. Re: My next project...a twinplex?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-08 12:10:39 UTC
From: kc2siz@...
Topic: 26765 Message: 26782

Thanks Les. Good points all, and I did find the text file about the twinplex. Lots of great info there.

26783. RE: 716 Regen heard Spain

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-09 11:43:54 UTC
From: Bry Carling
Topic: 26783 Message: 26783

Rob - and others - you can buy a complete audio amplifier board with several watts of good audio for $2-3 on eBay including shipping. I see a lot of guys wanting to get some $1.69 chip and build their own amplifier. It's a LOT less work and hassle and the things are well made.

I bought several different types to experiment with them, and they do fine.

Rob congratulations on your excellent work with that regen!

Bry AF4KPosted by: "Rob" roomberg@... kb3byt
Date: Thu Jul 7, 2016 11:54 pm ((PDT))

Sort of like a kid on Christmas morning.
This stuff never ceases to amaze me.

I heard EA5FX and KG0RD on this project board radio tonight:
http://www.learnmorsecode.com/716/716.html

I'm in PA so EA5FX is 3,850 miles east of me and
KG0RD is 1,056 miles west of me.

I am still using the outboard mini guitar amplifier.
Definitely have not debugged the failing TDA7052 circuit.

26784. Re: [regenrx] RE: 716 Regen heard Spain

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-09 15:59:14 UTC
From: Rob
Topic: 26783 Message: 26784

The mission was not to buy the project.
The mission was to learn how to build the 716 with the least amount of
room for error
so handing a pile of parts to kids... scouts..... could be guaranteed a
certain degree of success.

I had examined all sorts of audio amplifier possibilities ranging from
discrete components to ICs.
I was chasing the MPF102 / TDA7052 solution only because I found that
the TDA7052 is the IC used in the
HONEYTONE guitar amplifier in the picture here:
http://www.learnmorsecode.com/716/71601.jpg

BUT
after opening up the HONEYTONE and examining the circuit board with a
microscope I found there
is a TL072 opamp and TDA7052 no other ICs so I figure I am not really
doing an apples to apples comparison
with my TDA7052 circuit unless I was to use TL072 as tone control and
pre-amp.

It would have been nice to have the 1W punch amp circuit work as
described but I could not
replicate until all mail ordered parts arrived.... which was just now...
mail brought the monolithic 1Uf C1 caps today.
Noting all the other experiments with 1 and 10 and 20 uF caps brought no
success.
http://www.learnmorsecode.com/amp/1w_Punch_amp_schematic_MPF102andTDA7052.jpg

On 07/09/2016 07:43 AM, Bry Carling af4k@... [regenrx] wrote:
>
> Rob - and others - you can buy a complete audio amplifier board with
> several watts
> of good audio for $2-3 on eBay including shipping. I see a lot of
> guys wanting to get some $1.69 chip and build their own amplifier.
> It's a LOT less work and hassle and the things are well made.
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> fine.
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> Rob congratulations on your excellent work with that regen!
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> http://www.learnmorsecode.com/716/716.html
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> I'm in PA so EA5FX is 3,850 miles east of me and
> KG0RD is 1,056 miles west of me.
>
> I am still using the outboard mini
> guitar amplifier.
> Definitely have not debugged the failing TDA7052 circuit.
>
>
>

26785. RE: [regenrx] RE: 716 Regen heard Spain

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-09 16:06:55 UTC
From: Mike Feher
Topic: 26783 Message: 26785

So, in that case, what is wrong with the good and proven LM386? I have been using those since the 70's without any problems. - Mike

Mike B. Feher, N4FS

89 Arnold Blvd.

Howell, NJ, 07731

732-886-5960

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Saturday, July 09, 2016 11:59 AM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] RE: 716 Regen heard Spain

The mission was not to buy the project.
The mission was to learn how to build the 716 with the least amount of room for error
so handing a pile of parts to kids... scouts..... could be guaranteed a certain degree of success.

I had examined all sorts of audio amplifier possibilities ranging from discrete components to ICs.
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HONEYTONE guitar amplifier in the picture here:
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BUT
after opening up the HONEYTONE and examining the circuit board with a microscope I found there
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with my TDA7052 circuit unless I was to use TL072 as tone control and pre-amp.

It would have been nice to have the 1W punch amp circuit work as described but I could not
replicate until all mail ordered parts arrived.... which was just now... mail brought the monolithic 1Uf C1 caps today.
Noting all the other experiments with 1 and 10 and 20 uF caps brought no success.
http://www.learnmorsecode.com/amp/1w_Punch_amp_schematic_MPF102andTDA7052.jpg

---

26786. Re: [regenrx] RE: 716 Regen heard Spain

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-09 16:51:27 UTC
From: Rob
Topic: 26783 Message: 26786

ahh yes.... LM386...
for a dollar:
http://www.learnmorsecode.com/help/LM386amp.JPG

http://www.learnmorsecode.com/help/cwpmosfet.html

The TDA7052 is a bit more powerful than LM386.
I don't know the exact specifications but I have LM386 and TD7052 amplifiers here that
are hooked up to 10 inch speakers.
The TDA7052 amplifier has a bit more uuuummmpphhh to it.
Not just room filling sound.... been used outdoors ... street filling sound.

I have a pile of LM386 and TDA7052 ICs .
I have been down the LM386 path.
I built the FORREST MIMS book described 741 pre-amp with LM386 audio amp and attached it to a 1N34A crystal radio 20 years ago and heard the world. No selectivity..... just a crowded room full of 50 broadcast band radio stations.
It sounded like a cocktail party in Chinese, Spanish, Russian,French...etc.

Do you have any circuit examples of how you have used the LM386 to amplify RF circuit output?

On 07/09/2016 12:06 PM, 'Mike Feher' n4fs@... [regenrx] wrote:
> So, in that case, what is wrong with the good and proven LM386? I have
> been using those since the 70?s without any problems. ? Mike
>
> Mike B. Feher, N4FS
>
> 89 Arnold Blvd.
>
> Howell, NJ, 07731
>
> 732-886-5960
>
> *From: *regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
> *Sent:* Saturday, July 09, 2016 11:59 AM
> *To:* regenrx@yahoogroups.com
> *Subject:* Re: [regenrx] RE: 716 Regen heard Spain
>
> The mission was not to buy the project.
> The mission was to learn how to build the 716 with the least amount of
> room for error

> so handing a pile of parts to kids... scouts..... could be guaranteed
> a certain degree of success.
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> I had examined all sorts of audio amplifier possibilities ranging from
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> I was chasing the MPF102 / TDA7052 solution only because I found that
> the TDA7052 is the IC used in the
> HONEYTONE guitar amplifier in the picture here:
> http://www.learnmorsecode.com/716/71601.jpg
> <http://www.learnmorsecode.com/716/71601.jp%0A%20g>
>
> BUT
> after opening up the HONEYTONE and examining the circuit board with a
> microscope I found there
> is a TL072 opamp and TDA7052 no other ICs so I figure I am not really
> doing an apples to apples comparison
> with my TDA7052 circuit unless I was to use TL072 as tone control and
> pre-amp.
>
> It would have been nice to have the 1W punch amp circuit work as
> described but I could not
> replicate until all mail ordered parts arrived.... which was just
> now... mail brought the monolithic 1Uf C1 caps today.
> Noting all the other experiments with 1 and 10 and 20 uF caps brought
> no success.
> http://www.learnmorsecode.com/amp/1w_Punch_amp_schematic_MPF102andTDA7052.jpg
>
>
> ___< /p>
>
>

26787. WBR using Far Circuits?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-10 10:40:06 UTC
From: rhulett1@...
Topic: 26787 Message: 26787

I am wanting to build a WBR receiver. Have used manhattan previously but would prefer using a the Far Circuits board. Several threads mentioned abandoning the board and building manhattan style. Has anyone been successful using the board and if so, what modifications were needed to be successful?

73, Curt KB5JO

26788. Hybrid MW regen with CV3929

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-10 10:40:45 UTC
From: krysatec@...
Topic: 26788 Message: 26788
Attachments: 3 described; binary payloads are missing from this source WARC

Hi all, see pictures... Best regards, Jara "Rat", Czechia

26789. free TDA7052 amp chips to play

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-11 15:35:14 UTC
From: Rob
Topic: 26789 Message: 26789

I'm at the end of my rope with this audio amplifier.

I am sure I am probably doing something extremely simple stupid but I
can not get this IC to play.

The mission was to simply add a very loud ...room filling... audio
amplifier to demonstrate the simplicity
of the experimental 7.16 resonator regenerative receiver circuit:

http://www.learnmorsecode.com/716/VK3YEmodKB3BYT.jpg

more pictures and details here:
http://www.learnmorsecode.com/716/716.html
http://www.learnmorsecode.com/716/index.html

I had found a guitar amplifier circuit that used the TDA7052 IC and I
have years of playing

http://www.jimthorpelivemusic.com/mando/index.html

electric mandolin using a HONEYTONE guitar amp so I thought it would be
a no brainer to
build this circuit:

http://www.learnmorsecode.com/amp/1w_Punch_amp_schematic_MPF102andTDA7052.jpg

but apparently I am not qualified to operate this appliance......

I can not get any audio more than very slight headphone level audio out
of this IC.
I've tried swapping out all sorts of capacitor values and configurations
per advice from
all directions..... but still no amplification.

The data sheet says the TDA7052 "A" has a volume control so I swapped
out the TDA7052

http://www.learnmorsecode.com/amp/TDA7052Avc.jpg
http://www.learnmorsecode.com/amp/TDA7052A_AT.pdf

with a TDA7052A and added the 1uF and 1Mohm volume control and still got
nothing.

and then
as always
unplugged the 716 radio output from the experimental board and plugged
it into the
HONEYTONE amplifier and heard CW blasting.

So
at this time I am offering to mail TDA7052 and TDA7052A chips to anyone
that wants to play with
building an audio amplifier to add to the 716 project radio here.
You keep the chips.... whatever you build.... I just want a picture
and schematic of something that
works so I can build it here and do the scouts projects.

26790. Re: [regenrx] free TDA7052 amp chips to play

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-11 16:02:52 UTC
From: Edwin Carter
Topic: 26789 Message: 26790

On 7/11/2016 11:35 AM, Rob roomberg@... [regenrx] wrote:
>
> I'm at the end of my rope with this audio amplifier.
>
> I am sure I am probably doing something extremely simple stupid but I
> can not get this IC to play.
>
> The mission was to simply add a very loud ...room filling... audio
> amplifier to demonstrate the simplicity
> of the experimental 7.16 resonator regenerative receiver circuit:
>
> http://www.learnmorsecode.com/716/VK3YEmodKB3BYT.jpg
>
> more pictures and details here:
> http://www.learnmorsecode.com/716/716.html
> http://www.learnmorsecode.com/716/index.html
>
> I had found a guitar amplifier circuit that used the TDA7052 IC and I
> have years of playing
>
> http://www.jimthorpelivemusic.com/mando/index.html
>
> electric mandolin using a HONEYTONE guitar amp so I thought it would be
> a no brainer to
> build this circuit:
>
> http://www.learnmorsecode.com/amp/1w_Punch_amp_schematic_MPF102andTDA7052.jpg
>
> but apparently I am not qualified to operate this appliance......
>
> I can not get any audio more than very slight headphone level audio out
> of this IC.
> I've tried swapping out all sorts of capacitor values and configurations
> per advice from
> all directions..... but still no amplification.
>
> The data sheet says the TDA7052 "A" has a volume control so I swapped
> out the TDA7052
>
> http://www.learnmorsecode.com/amp/TDA7052Avc.jpg
> http://www.learnmorsecode.com/amp/TDA7052A_AT.pdf
>
> with a TDA7052A and added the 1uF and 1Mohm volume control and still got
> nothing.
>

> and then
> as always
> unplugged the 716 radio output from the experimental board and plugged
> it into the
> HONEYTONE amplifier and heard CW blasting.
>
> So
> at this time I am offering to mail TDA7052 and TDA7052A chips to anyone
> that wants to play with
> building an audio amplifier to add to the 716 project radio here.
> You keep the chips.... whatever you build.... I just want a picture
> and schematic of something that
> works so I can build it here and do the scouts projects.
>
>

I notice pin 1 is signal ground. Pin 6 is power ground. I don't know whether they are connected or not. Also make sure that the mpf-102 is not hooked up incorrectly, gate and source. Please try and publish results.

Thank you,

Edwin P Carter / WA4YHL

26791. Re: [regenrx] free TDA7052 amp chips to play

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-11 16:08:56 UTC
From: Edwin Carter
Topic: 26789 Message: 26791

On 7/11/2016 12:02 PM, Edwin Carter ecarter@... [regenrx] wrote:
>
> On 7/11/2016 11:35 AM, Rob roomberg@... [regenrx] wrote:
>>
>> I'm at the end of my rope with this audio amplifier.
>>
>> I am sure I am probably doing something extremely simple stupid but I
>> can not get this IC to play.
>>
>> The mission was to simply add a very loud ...room filling... audio
>> amplifier to demonstrate the simplicity
>> of the experimental 7.16 resonator regenerative receiver circuit:
>>
>> http://www.learnmorsecode.com/716/VK3YEmodKB3BYT.jpg
>>
>> more pictures and details here:
>> http://www.learnmorsecode.com/716/716.html
>> http://www.learnmorsecode.com/716/index.html
>>
>> I had found a guitar amplifier circuit that used the TDA7052 IC and I
>> have years of playing
>>
>> http://www.jimthorpelivemusic.com/mando/index.html
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>> electric mandolin using a HONEYTONE guitar amp so I thought it would be
>> a no brainer to
>> build this circuit:
>>
>> http://www.learnmorsecode.com/amp/1w_Punch_amp_schematic_MPF102andTDA7052.jpg
>>
>> but apparently I am not qualified to operate this appliance......
>>
>> I can not get any audio more than very slight headphone level audio out
>> of this IC.
>> I've tried swapping out all sorts of capacitor values and configurations
>> per advice from
>> all directions..... but still no amplification.
>>
>> The data sheet says the TDA7052 "A" has a volume control so I swapped
>> out the TDA7052
>>
>> http://www.learnmorsecode.com/amp/TDA7052Avc.jpg
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>> with a TDA7052A and added the 1uF and 1Mohm volume control and still got

>> nothing.
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>> and then
>> as always
>> unplugged the 716 radio output from the experimental board and plugged
>> it into the
>> HONEYTONE amplifier and heard CW blasting.
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>> So
>> at this time I am offering to mail TDA7052 and TDA7052A chips to anyone
>> that wants to play with
>> building an audio amplifier to add to the 716 project radio here.
>> You keep the chips.... whatever you build.... I just want a picture
>> and schematic of something that
>> works so I can build it here and do the scouts projects.
>>
> I notice pin 3 is signal ground. Pin 6 is power ground. I don't know
> whether they are connected or not. Also make sure that the mpf-102 is
> not hooked up incorrectly, gate and source. Please try and publish
> results.
>
disregard previous reply
>
> Thank you,
>
> Edwin P Carter / WA4YHL
>
>

26792. Re: [regenrx] free TDA7052 amp chips to play

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-11 16:23:17 UTC
From: Tom Lee
Topic: 26789 Message: 26792

When trying to troubleshoot things like this, it's a good idea to start
by checking dc levels (after precluding obvious things, like wiring
errors). That by itself often reveals where the problem lies.

In this case, note that the MPF102 is a depletion-mode n-channel JFET,
so its source voltage will be above the gate voltage by an amount that
is not guaranteed to tight limits by the manufacturer, but which is
typically a few volts. If the signal driving the gate has a positive dc
component, the FET output could easily be pegged near the supply rail.
To see if that's the problem, just measure the source voltage with the
gate connected to whatever signal source you've been trying to use. If
it's too close to the rails, then you have an idea where your problem lies.

If you are using supply voltages at the lower end of the indicated
range, the probability of a problem increases. Try increasing the supply
to 12V (if you haven't already tried this) and see if things are better.
Also try a different FET (preferably one from a different production
run). You may have gotten one that is close to the edge of the
pinchoff-voltage spec (which exceeds your supply voltage!).

Good luck!

--Cheers,
Tom

--
Prof. Thomas H. Lee
Allen Bldg. Rm.205
420 Via Palou Mall
Stanford University
Stanford, CA 94305-4070
http://www-smirc.stanford.edu

On 7/11/2016 8:35 AM, Rob roomberg@... [regenrx] wrote:
>
> I'm at the end of my rope with this audio amplifier.
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> I am sure I am probably doing something extremely simple stupid but I
> can not get this IC to play.
>
> The mission was to simply add a very loud ...room filling... audio
> amplifier to demonstrate the simplicity
> of the experimental 7.16 resonator regenerative receiver circuit:
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> http://www.learnmorsecode.com/716/VK3YEmodKB3BYT.jpg
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> I had found a guitar amplifier circuit that used the TDA7052 IC and I
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> build this circuit:
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> http://www.learnmorsecode.com/amp/1w_Punch_amp_schematic_MPF102andTDA7052.jpg
>
> but apparently I am not qualified to operate this appliance......
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> I can not get any audio more than very slight headphone level audio out
> of this IC.
>

26793. Re: [regenrx] free TDA7052 amp chips to play

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-11 17:10:02 UTC
From: Leonard Meek
Topic: 26789 Message: 26793

Rob, make sure you have the pin numbers correct. This is a common problem. Tube are viewed from the bottom and the pin numbers go clockwise from the key or the big pins. IC pins are viewed from the top and go counter clockwise from the dot or notch. This can be confusing especially with wire wrap sockets, wired from below. Also, make sure caps with a "+" sign on them have that side connected to the part of the circuit that has positive voltage on it.

Leonard

----- Original Message -----
From: Tom Lee tomlee@ee.stanford.edu [regenrx]
To: regenrx@yahoogroups.com
Sent: Monday, July 11, 2016 6:23 AM
Subject: Re: [regenrx] free TDA7052 amp chips to play

When trying to troubleshoot things like this, it's a good idea to start by checking dc levels (after precluding obvious things, like wiring errors). That by itself often reveals where the problem lies.

In this case, note that the MPF102 is a depletion-mode n-channel JFET, so its source voltage will be above the gate voltage by an amount that is not guaranteed to tight limits by the manufacturer, but which is typically a few volts. If the signal driving the gate has a positive dc component, the FET output could easily be pegged near the supply rail. To see if that's the problem, just measure the source voltage with the gate connected to whatever signal source you've been trying to use. If it's too close to the rails, then you have an idea where your problem lies.

If you are using supply voltages at the lower end of the indicated range, the probability of a problem increases. Try increasing the supply to 12V (if you haven't already tried this) and see if things are better. Also try a different FET (preferably one from a different production run). You may have gotten one that is close to the edge of the pinchoff-voltage spec (which exceeds your supply voltage!).

Good luck!

--Cheers,
Tom

--
Prof. Thomas H. Lee
Allen Bldg. Rm.205
420 Via Palou Mall
Stanford University
Stanford, CA 94305-4070
http://www-smirc.stanford.edu

26794. Re: [regenrx] free TDA7052 amp chips to play

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-11 17:57:31 UTC
From: Tom Lee
Topic: 26789 Message: 26794

To add to the great advice from Leonard, make sure that you've got the FET pinouts right, too. Facing the flat side with leads pointing down, the pins are DSG, from left to right.

--Tom

--
Prof. Thomas H. Lee
Allen Bldg. Rm.205
420 Via Palou Mall
Stanford University
Stanford, CA 94305-4070
http://www-smirc.stanford.edu

On 7/11/2016 10:10 AM, 'Leonard Meek' lemeek@... [regenrx]
wrote:
>
> □
>
> *Rob, make sure you have the pin numbers correct. This is a common
> problem. Tube are viewed from the bottom and the pin numbers go
> clockwise from the key or the big pins. IC pins are viewed from the
> top and go counter clockwise from the dot or notch. This can be
> confusing especially with wire wrap sockets, wired from below. Also,
> make sure caps with a "+" sign on them have that side connected to the
> part of the circuit that has positive voltage on it. *
> **
> *Leonard*
> **
>
> ----- Original Message -----
> *From:* Tom Lee tomlee@... [regenrx]
> <mailto:tomlee@...%20[regenrx]>
> *To:* regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>
> *Sent:* Monday, July 11, 2016 6:23 AM
> *Subject:* Re: [regenrx] free TDA7052 amp chips to play
>
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> things are better. Also try a different FET (preferably one from a
> different production run). You may have gotten one that is close
> to the edge of the pinchoff-voltage spec (which exceeds your
> supply voltage!).
>
> Good luck!
>
> --Cheers,
> Tom
>
> --
> Prof. Thomas H. Lee
> Allen Bldg. Rm.205
> 420 Via Palou Mall
> Stanford University
> Stanford, CA 94305-4070
> http://www-smirc.stanford.edu
>
>

26795. Re: [regenrx] free TDA7052 amp chips to play

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-11 19:56:53 UTC
From: Jim Simmons
Topic: 26789 Message: 26795

Do you have a coupling capacitor between the output of your radio and the the gate of the MPF-102? If you don't then your are biasing the Transistor into saturation with the DC voltage from the output of your radio. I don't see a coupling capacitor on your schematics. If there is none, then check the MPF-102 to make sure it has not been destroyed. If it has, then replace it and put a coupling capacitor in that signal path.

Jim~N5MSJ

On 7/11/2016 10:35 AM, Rob roomberg@... [regenrx] wrote:
>
> I'm at the end of my rope with this audio amplifier.
>
> I am sure I am probably doing something extremely simple stupid but I
> can not get this IC to play.
>
> The mission was to simply add a very loud ...room filling... audio
> amplifier to demonstrate the simplicity
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> http://www.learnmorsecode.com/716/VK3YEmodKB3BYT.jpg
>
> more pictures and details here:
> http://www.learnmorsecode.com/716/716.html
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>
> I had found a guitar amplifier circuit that used the TDA7052 IC and I
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> http://www.jimthorpelivemusic.com/mando/index.html
>
> electric mandolin using a HONEYTONE guitar amp so I thought it would be
> a no brainer to
> build this circuit:
>
> http://www.learnmorsecode.com/amp/1w_Punch_amp_schematic_MPF102andTDA7052.jpg
>
> but apparently I am not qualified to operate this appliance......
>
> I can not get any audio more than very slight headphone level audio out
> of this IC.
> I've tried swapping out all sorts of capacitor values and configurations
> per advice from
> all directions..... but still no amplification.
>

> The data sheet says the TDA7052 "A" has a volume control so I swapped
> out the TDA7052
>
> http://www.learnmorsecode.com/amp/TDA7052Avc.jpg
> http://www.learnmorsecode.com/amp/TDA7052A_AT.pdf
>
> with a TDA7052A and added the 1uF and 1Mohm volume control and still got
> nothing.
>
> and then
> as always
> unplugged the 716 radio output from the experimental board and plugged
> it into the
> HONEYTONE amplifier and heard CW blasting.
>
> So
> at this time I am offering to mail TDA7052 and TDA7052A chips to anyone
> that wants to play with
> building an audio amplifier to add to the 716 project radio here.
> You keep the chips.... whatever you build.... I just want a picture
> and schematic of something that
> works so I can build it here and do the scouts projects.
>
>

26796. FS: Patco Thermal Wire Stripper

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-11 20:51:19 UTC
From: Bry Carling
Topic: 26796 Message: 26796

FOR SALE:
Patco Services
model PTS-30
Thermal Wire Stripper.
Excellent for all electrical and electronic work requiring fast and accurate wire stripping.

Used but in perfectly fine, clean operating condition and ready to use....

Retail price - $125.00

Available for $50.00 plus shipping.

As seen here:
http://www.digikey.com/product-detail/en/patco-services-inc/PTS-30/PTS-30-ND/102961?WT.srch=1&gclid=COi3ybqX7M0CFYpbfgod66QL3Q

73 de AF4K, Bry Carling

http://af4k.com/testgear.htm

26797. Re: free TDA7052 amp chips to play

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-11 21:43:05 UTC
From: katz.ajamas@...
Topic: 26789 Message: 26797

I'll have a look in the parts bin. If I can find one I'll wire it up and take a photo.

With few exceptions, tubes and ICs are numbered clockwise when viewed from the wiring(pins) side. Imagine teaching a bunch of assembly techs to count anticlockwise.

All the notes I have seen for this chip show a bias(?) resistor from pin 2 to ground. One manufacturers application note shows a complete audio amp. It has a 5k resistor from TDA5052 pin 2 to ground. The 10k in that receiver ckt you linked should do. Wire it to pin 2 and use a common ground. Do not forget the 100nF cap between pins 6 and 1. Add speaker and power and it should work.

73, -Bob ah7i/w4

26798. Re: [regenrx] Re: free TDA7052 amp chips to play

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-12 01:08:19 UTC
From: Leonard Meek
Topic: 26789 Message: 26798

The reference mark on an IC is on top of the chip and indicates pin #1. The pins are numbered down one side and up the other, in a conter clockwise direction, looking at the top of the IC. That's the way they're shown in the data sheets. Just remember to reverse everything when looking at the IC from the bottom.

Don't assume that all transistors have the same pinout. Some are E-B-C, or S-G-D, while others are E-C-B, or S-D-G. Always refer to the data sheets before committing to a hookup.

Leonard

----- Original Message -----
From: katz.ajamas@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Monday, July 11, 2016 11:43 AM
Subject: [regenrx] Re: free TDA7052 amp chips to play

I'll have a look in the parts bin. If I can find one I'll wire it up and take a photo.

With few exceptions, tubes and ICs are numbered clockwise when viewed from the wiring(pins) side. Imagine teaching a bunch of assembly techs to count anticlockwise.

All the notes I have seen for this chip show a bias(?) resistor from pin 2 to ground. One manufacturers application note shows a complete audio amp. It has a 5k resistor from TDA5052 pin 2 to ground. The 10k in that receiver ckt you linked should do. Wire it to pin 2 and use a common ground. Do not forget the 100nF cap between pins 6 and 1. Add speaker and power and it should work.

73, -Bob ah7i/w4

26799. TDA7052 amp chips pinout

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-12 02:16:04 UTC
From: Rob
Topic: 26789 Message: 26799

I am not having pinout issues.
Here is the data sheet pinout for the TDA7052A
and the TDA7052 is the same except for the volume control is omitted on
the TDA7052
and is just N.C. not connected.

http://www.learnmorsecode.com/amp/tda7052pinout.jpg

26800. Re: [regenrx] TDA7052 amp chips pinout

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-12 13:20:43 UTC
From: Suzie Creamcheeze
Topic: 26789 Message: 26800

Have you tried the test circuit in the datasheet? I drew this schematic
looking at the datasheet for reference.

https://scontent-iad3-1.xx.fbcdn.net/v/t1.0-9/13654210_1704731636443934_1172094518084847806_n.jpg?oh=ee60a2475aeb54d238bda9cd6e82b2f1&oe=57F21280

Warm Regards,
SC

On Mon, Jul 11, 2016 at 10:16 PM, Rob roomberg@... [regenrx] <
regenrx@yahoogroups.com> wrote:

>
>
> I am not having pinout issues.
> Here is the data sheet pinout for the TDA7052A
> and the TDA7052 is the same except for the volume control is omitted on
> the TDA7052
> and is just N.C. not connected.
>
> http://www.learnmorsecode.com/amp/tda7052pinout.jpg
>
>
>

--
creamcheeze.suzie@...

26801. Re: TDA7052 amp chips pinout

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-12 13:55:45 UTC
From: katz.ajamas@...
Topic: 26789 Message: 26801

I rooted around in the IC bin last night. Found a LM386 and a couple of ua739's. No 7052s. Where did you get the tda7052s? I used to buy the radio shack IC's that were labeled as "fully functional...may not meed manufacturers specifications" and some of them would not work at all. 73, -Bob ah7i/w4

26802. Re: [regenrx] TDA7052 amp chips pinout

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-12 15:19:17 UTC
From: Rob
Topic: 26789 Message: 26802

YES
when I found this in the datasheet
http://www.learnmorsecode.com/amp/TDA7052Avc.jpg
I swapped out the TDA7052 with a TDA7052A and added the 1uF and 1M ohm
resistor.

BUT
since the TDA7052 didn't amplify I wasn't real surprised that the
TDA7052A didn't amplify.

Thats when I figured I share chips and see what everybody else comes up
with them.

On 07/12/2016 09:20 AM, Suzie Creamcheeze creamcheeze.suzie@...
[regenrx] wrote:
> Have you tried the test circuit in the datasheet? I drew this
> schematic looking at the datasheet for reference.
>
> https://scontent-iad3-1.xx.fbcdn.net/v/t1.0-9/13654210_1704731636443934_1172094518084847
806_n.jpg?oh=ee60a2475aeb54d238bda9cd6e82b2f1&oe=57F21280
>
> Warm Regards,
> SC
>
> On Mon, Jul 11, 2016 at 10:16 PM, Rob roomberg@...
> <mailto:roomberg@...> [regenrx] <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>> wrote:
>
> I am not having pinout issues.
> Here is the data sheet pinout for the TDA7052A
> and the TDA7052 is the same except for the volume control is
> omitted on
> the TDA7052
> and is just N.C. not connected.
>
> http://www.learnmorsecode.com/amp/tda7052pinout.jpg
>
>
>
>
> --
> creamcheeze.suzie@... <mailto:creamcheeze.suzie@...>
>

26803. Re: [regenrx] TDA7052 amp chips pinout

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-12 19:17:14 UTC
From: Leonard Meek
Topic: 26789 Message: 26803
Attachments: 1 described; binary payloads are missing from this source WARC

The datasheet shows a direct connection to an 8 ohm speaker, with no isolating cap. The input is rated at 100K so it shouldn't be loading the signal souece. Have you considered the posibility that your signal input just isn't large enough? Maybe it needs a preamp. I used an LM386 in my Mk.21 with less that amazing results, until I added a source follower to the input, per David Newkirk. Made a big difference, but not ear splitting. I don't see anything about minimum input signal voltage. With its high input impedance, you should get a hum if you touch your finger to the input terminal.

----- Original Message -----
From: Rob roomberg@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Tuesday, July 12, 2016 5:19 AM
Subject: Re: [regenrx] TDA7052 amp chips pinout

YES
when I found this in the datasheet
http://www.learnmorsecode.com/amp/TDA7052Avc.jpg
I swapped out the TDA7052 with a TDA7052A and added the 1uF and 1M ohm resistor.

BUT
since the TDA7052 didn't amplify I wasn't real surprised that the TDA7052A didn't amplify.

Thats when I figured I share chips and see what everybody else comes up with them.

26804. TDA7052 amp chips tinkerers

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-12 20:49:13 UTC
From: Rob
Topic: 26789 Message: 26804

I got five tinkerers on the chip offer
so today I mailed a package to each of you containing
1 TDA7052
1 TDA7052A
1 MPF102
2 7.16 ceramic resonators
1 1uF monolithic chip cap
1 .1uF poly cap

the 5 tinkerers:

David Adams
Jimmy D Hill
Bob Liesenfeld WB0POQ
Thang Le
Mike Haydon

should see the package in 3 days.

26805. Re: [regenrx] TDA7052 amp chips tinkerers

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-12 21:29:17 UTC
From: William Wood
Topic: 26789 Message: 26805

Sorry I'm late on your offer OM
But if it is possible would like to get in on this…
Been out of town last week, and the week before
and this week been fairly busy, but I would
appreciate the chance to play with these…

Just set up my Pixie to build too, and sent off for
the receiver kit from that latest QST article, so should
be able to do some building this next few weeks :)

Not been paying too much attention to all the mails
of late either, so if you have a charge for this I'll
be happy to chip in OM!

Thanks for doing this
73
Bill KE9XQ

William Wood
W2788 Birch Lane
La Crosse, WI 54601

On Jul 12, 2016, at 3:49 PM, Rob roomberg@... [regenrx] <regenrx@yahoogroups.com> wrote:

> I got five tinkerers on the chip offer
> so today I mailed a package to each of you containing
> 1 TDA7052
> 1 TDA7052A
> 1 MPF102
> 2 7.16 ceramic resonators
> 1 1uF monolithic chip cap
> 1 .1uF poly cap
>
> the 5 tinkerers:
>
> David Adams
> Jimmy D Hill
> Bob Liesenfeld WB0POQ
> Thang Le
> Mike Haydon
>
> should see the package in 3 days.
>
>
>

26806. TDA7052 amp chips tinkerers ..... never too late

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-13 01:17:25 UTC
From: Rob
Topic: 26789 Message: 26806

Its never too late to play radio.

It will be a day or two before I get to the post office again.

My first HF radio was a KNIGHTSMITE.
pretty much based on the PIXIE.

I must say that I am having a lot more fun dabbling with this 7.16
ceramic resonator radio than I ever had with that KNIGHTSMITE.
The KNIGHTSMITE was crystal rock bound at 3.686 Mhz and heard few QSOs
while this 7.16 project heard more than
100 Field Day QSOs ...and other CW contests... and overseas DX. Really
what the hobby is all about.

I am not selling anything here.
I am just trying to learn how to build simple radios that work using
parts that are modern enough that
it can be a cheap and repeatable project we can do with the kids.
Its not enough to build a simple crystal radio anymore.
My local daytime radio stations are not anything children can listen to.
Its all just assholes screaming political conspiracy theories and
preachers and sports talk radio.
No music at all. Just garbage radio.

So I figured its better to chase short wave radio DX stations and CW
when building a kit.

On 07/12/2016 05:29 PM, William Wood ke9xq@... [regenrx] wrote:
>
> Sorry I?m late on your offer OM
>
> But if it is possible would like to get in on this?
> Been out of town last week, and the week before
> and this week been fairly busy, but I would
> appreciate the chance to play with these?
>
> Just set up my Pixie to build too, and sent off for
> the receiver kit from that latest QST article, so should
> be able to do some building this next few weeks :)
>
> Not been paying too much attention to all the mails
> of late either, so if you have a charge for this I?ll
> be happy to chip in OM!
>
> Thanks for doing this
> 73

> Bill KE9XQ
>
> William Wood
> W2788 Birch Lane
> La Crosse, WI 54601
>
>
> On Jul 12, 2016, at 3:49 PM, Rob roomberg@...
> <mailto:roomberg@...> [regenrx] <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>> wrote:
>
>> I got five tinkerers on the chip offer
>> so today I mailed a package to each of you containing
>> 1 TDA7052
>> 1 TDA7052A
>> 1 MPF102
>> 2 7.16 ceramic resonators
>> 1 1uF monolithic chip cap
>> 1 .1uF poly cap
>>
>> the 5 tinkerers:
>>
>> David Adams
>> Jimmy D Hill
>> Bob Liesenfeld WB0POQ
>> Thang Le
>> Mike Haydon
>>
>> should see the package in 3 days.
>>
>
>
> --
> P

26807. Re: TDA7052 amp chips tinkerers

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-13 11:17:41 UTC
From: kf8zn@...
Topic: 26789 Message: 26807

Dave,

Thanks!

To the others you sent this package to:

Do we want to collaborate?

Mike Haydon AC2Q

kf8zn@yahoo.com

26808. Re: free TDA7052 amp chips to play

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-13 15:02:31 UTC
From: kf8zn@...
Topic: 26789 Message: 26808
Attachments: 1 described; binary payloads are missing from this source WARC

I would say your issue is one of inadequate gain. The Schematic for the Honeytone is attached.

It uses 2 stages of opamp amplification with an overall voltage gain up to 200 (46db), prior to the TDA7052.
Your MPF102 preamp likely has a voltage gain of 2-3 db.

26809. Re: [regenrx] Re: TDA7052 amp chips tinkerers

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-13 15:29:41 UTC
From: William Wood
Topic: 26789 Message: 26809

Greetings Everyone
'Collaborators' is a good idea for the tinkerers
just to let you guys know, I'm dumb enough
that you will probably not learn much from
my end. :) But I will be happy to share anything
I might run across, more importantly tho is how
much you will teach me. :) :) :)
Looking forward to this.
73 everyone
Bill KE9XQ

On Jul 13, 2016, at 6:17 AM, kf8zn@... [regenrx] <regenrx@yahoogroups.com> wrote:

> Dave,
>
> Thanks!
>
> To the others you sent this package to:
>
> Do we want to collaborate?
>
> Mike Haydon AC2Q
>
> kf8zn@...
>
>

26810. Re: [regenrx] Re: free TDA7052 amp chips to play [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-13 18:36:42 UTC
From: Rob
Topic: 26789 Message: 26810

THANK YOU!!!!!!!

On 07/13/2016 11:02 AM, kf8zn@... [regenrx] wrote:
>
> I would say your issue is one of inadequate gain.
>
> The Schematic for the Honeytone is attached.
>
> It uses 2 stages of opamp amplification with an overall voltage gain
> up to 200 (46db), prior to the TDA7052.
> Your MPF102 preamp likely has a voltage gain of 2-3 db.
>

26811. single 9 volt battery supply for TL072 in HONEYTONE amplifier

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-13 19:16:01 UTC
From: Rob
Topic: 26789 Message: 26811

This schematic shows TL072 opamp but does not show the battery
connection to the opamp.
Which confuses me because I thought the TL072 needed a dual power
supply... plus 9 and minus 9 volts using ground in the middle. The
HONEYTONE amp only uses one 9 volt battery so how did they do that?
Is it merely a matter of connecting the one 9volt battery to pin 4 -VE
...... and pin 8 +VE of the TL072 ?

On 07/13/2016 02:36 PM, Rob roomberg@... [regenrx] wrote:
>
> THANK YOU!!!!!!!
>
>
> On 07/13/2016 11:02 AM, kf8zn@... [regenrx] wrote:
>>
>> I would say your issue is one of inadequate gain.
>>
>> The Schematic for the Honeytone is attached.
>>
>> It uses 2 stages of opamp amplification with an overall voltage gain
>> up to 200 (46db), prior to the TDA7052.
>> Your MPF102 preamp likely has a voltage gain of 2-3 db.
>
>

26812. Re: [regenrx] single 9 volt battery supply for TL072 in HONEYTONE amplifier

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-13 19:39:43 UTC
From: Mangrove
Topic: 26789 Message: 26812

Rob,

Both TL702 op amps have their + inputs biased to roughly 4.5V using the voltage divider resistors on the upper right hand side of the schematic. Their outputs are tied (through resistors) to their - inputs; hence their outputs are biased to the same 4.5V since the - inputs track the + inputs to a very small voltage delta.

I suspect the whole circuit including the two TL702 operate off a 9V power supply.

Thang Le

Sent from my iPad

> On Jul 13, 2016, at 12:16, Rob roomberg@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
> This schematic shows TL072 opamp but does not show the battery connection to the opamp.
> Which confuses me because I thought the TL072 needed a dual power supply... plus 9 and minus 9 volts using ground in the middle. The HONEYTONE amp only uses one 9 volt battery so how did they do that?
> Is it merely a matter of connecting the one 9volt battery to pin 4 -VE ..... and pin 8 +VE of the TL072 ?
>
>
>
>
>
>> On 07/13/2016 02:36 PM, Rob roomberg@... [regenrx] wrote:
>>
>> THANK YOU!!!!!!!
>>
>>
>>> On 07/13/2016 11:02 AM, kf8zn@... [regenrx] wrote:
>>>
>>> I would say your issue is one of inadequate gain.
>>>
>>> The Schematic for the Honeytone is attached.
>>>
>>> It uses 2 stages of opamp amplification with an overall voltage gain up to 200 (46db), prior to the TDA7052.
>>> Your MPF102 preamp likely has a voltage gain of 2-3 db.
>
>

26813. Re: [regenrx] My next project...a twinplex?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-14 00:41:42 UTC
From: Richard
Topic: 26765 Message: 26813

It can be done. My RAL receives SSB with better fidelity and clarity
than any modern receiver I've used. It really sounds good. AM is so
so. I opened the audio amplifier for higher frequency response, as it
was designed to roll-off above 1300 cycles. The detector is a 6D6 with
screen and suppressor grids tied together to a pot for regeneration
control.

Richard, AA1P

On 07/06/2016 06:03 PM, Doug Hancock nzerowva@... [regenrx] wrote:
> The twinplex will be just as bad on SSB as the rest of them unless you
> use very light tank coupling. Just enough to get good oscillation. If
> you want a solid SSB performer, check out a solid state regen I built
> a few months back.
> http://www.theradioboard.com/rb/viewtopic.php?f=4&t=6891
>
>
> On Wednesday, July 6, 2016 10:01 AM, "kc2siz@... [regenrx]"
> <regenrx@yahoogroups.com> wrote:
> I've built several regens, both solid and hollow state. They all
> worked, some better than others, but none of them have done as good a
> job as I'd like at demodulating SSB signals. I'd really like to remedy
> this.
>
> A friend of mine recommended that I build a twinplex for this purpose.
> Are there any other circuits you'd suggest? I don't care whether it
> uses tubes or transistors so long as it's a strong performer on SSB.
>
> Steve
>
>
>
>

26814. Re: [regenrx] single 9 volt battery supply for TL072 in HONEYTONE amplifier

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-14 02:27:48 UTC
From: Rob
Topic: 26789 Message: 26814

Here is a reworked image of the honeytone schematic.
I had to enhance the printed text to get a clear component value.
note the component we are discussing is the DUAL OP AMP TL072.

http://www.learnmorsecode.com/amp/honeyrule.jpg

In this image there are 3 colored resistors....
56k purple
47k green
1k red

can you tell me where would I attach a wire to this voltage divider
network to feed pin 4 (VCC-) of the TL072 op amp?

On 07/13/2016 03:39 PM, Mangrove mangrove@... [regenrx] wrote:
> Rob,
>
> Both TL702 op amps have their + inputs biased to roughly 4.5V using
> the voltage divider resistors on the upper right hand side of the
> schematic. Their outputs are tied (through resistors) to their -
> inputs; hence their outputs are biased to the same 4.5V since the -
> inputs track the + inputs to a very small voltage delta.
>
> I suspect the whole circuit including the two TL702 operate off a 9V
> power supply.
>
> Thang Le
>
> Sent from my iPad
>
> On Jul 13, 2016, at 12:16, Rob roomberg@...
> <mailto:roomberg@...> [regenrx] <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>> wrote:
>
>> This schematic shows TL072 opamp but does not show the battery
>> connection to the opamp.
>> Which confuses me because I thought the TL072 needed a dual power
>> supply... plus 9 and minus 9 volts using ground in the middle. The
>> HONEYTONE amp only uses one 9 volt battery so how did they do that?
>> Is it merely a matter of connecting the one 9volt battery to pin 4
>> -VE ..... and pin 8 +VE of the TL072 ?
>>
>>
>>
>>

>>
>> On 07/13/2016 02:36 PM, Rob roomberg@... [regenrx] wrote:
>>>
>>> THANK YOU!!!!!!!
>>>
>>>
>>> On 07/13/2016 11:02 AM, kf8zn@... [regenrx] wrote:
>>>>
>>>> I would say your issue is one of inadequate gain.
>>>>
>>>> The Schematic for the Honeytone is attached.
>>>>
>>>> It uses 2 stages of opamp amplification with an overall voltage
>>>> gain up to 200 (46db), prior to the TDA7052.
>>>> Your MPF102 preamp likely has a voltage gain of 2-3 db.
>>>
>>
>

26815. Re: [regenrx] single 9 volt battery supply for TL072 in HONEYTONE amplifier 2

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-14 02:32:14 UTC
From: Rob
Topic: 26789 Message: 26815

I'm sure I messed up that logic real good.

I definitely am missing something here......not knowing where pin 4
(Vcc-) gets attached to the 9 volt battery or if it needs to be attached
to a voltage divider pair of resistors.

On 07/13/2016 03:39 PM, Mangrove mangrove@... [regenrx] wrote:
> Rob,
>
> Both TL702 op amps have their + inputs biased to roughly 4.5V using
> the voltage divider resistors on the upper right hand side of the
> schematic. Their outputs are tied (through resistors) to their -
> inputs; hence their outputs are biased to the same 4.5V since the -
> inputs track the + inputs to a very small voltage delta.
>
> I suspect the whole circuit including the two TL702 operate off a 9V
> power supply.
>
> Thang Le
>
> Sent from my iPad
>
> On Jul 13, 2016, at 12:16, Rob roomberg@...
> <mailto:roomberg@...> [regenrx] <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>> wrote:
>
>> This schematic shows TL072 opamp but does not show the battery
>> connection to the opamp.
>> Which confuses me because I thought the TL072 needed a dual power
>> supply... plus 9 and minus 9 volts using ground in the middle. The
>> HONEYTONE amp only uses one 9 volt battery so how did they do that?
>> Is it merely a matter of connecting the one 9volt battery to pin 4
>> -VE ..... and pin 8 +VE of the TL072 ?
>>
>>
>>
>>
>>
>> On 07/13/2016 02:36 PM, Rob roomberg@... [regenrx] wrote:
>>>
>>> THANK YOU!!!!!!!
>>>
>>>
>>> On 07/13/2016 11:02 AM, kf8zn@... [regenrx] wrote:

>>>>
>>>> I would say your issue is one of inadequate gain.
>>>>
>>>> The Schematic for the Honeytone is attached.
>>>>
>>>> It uses 2 stages of opamp amplification with an overall voltage
>>>> gain up to 200 (46db), prior to the TDA7052.
>>>> Your MPF102 preamp likely has a voltage gain of 2-3 db.
>>>
>>
>

26816. Fwd: [regenrx] My next project...a twinplex?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-14 06:03:47 UTC
From: Thang Le
Topic: 26765 Message: 26816
Attachments: 2 described; binary payloads are missing from this source WARC

Hi,

I want to share a recent regen receiver design.

I attach schematics of two versions of an all transistor receiver that I built recently. The two versions differ in how the emitters of the pair of regeneration detector transistors are wired: in the simpler version, a variable resistor between 5 K ohm and 20 K ohm (to + supply line) should work fine. I prefer the other version, which uses a current source.

The receiver as built resolves SSB and CW signals well. If I build the circuit again, I would want to make the first stage of AF amplification be an emitter follower design. The AF feedback circuit was all guess work; I settled for what seems to work. I'm certain it's not optimized. I put in 5 stages of AF amp because I believed the smaller gain of each stage (due to the lower bias points that are necessary in this 1.5 V PS design) requires 5 stages! The last stage uses a PNP transistor because I want to use a grounded output audio jack (negative ground goes to metal box). In particular, I like the simplicity of the "Franklin" oscillator-regen design (requiring a single inductor), plus the double-diode "voltage doubler" envelope detection circuit.

Thang Le
AA6SV
---------- Forwarded message ----------
From: Richard brunneraa1p@... [regenrx] <regenrx@yahoogroups.com>
Date: Wed, Jul 13, 2016 at 5:41 PM
Subject: Re: [regenrx] My next project...a twinplex?
To: regenrx@yahoogroups.com

It can be done. My RAL receives SSB with better fidelity and clarity than any modern receiver I've used. It really sounds good. AM is so so. I opened the audio amplifier for higher frequency response, as it was designed to roll-off above 1300 cycles. The detector is a 6D6 with screen and suppressor grids tied together to a pot for regeneration control.

Richard, AA1P

On 07/06/2016 06:03 PM, Doug Hancock nzerowva@... [regenrx] wrote:

The twinplex will be just as bad on SSB as the rest of them unless you use very light tank coupling. Just enough to get good oscillation. If you want a solid SSB performer, check out a solid state regen I built a few months back. http://www.theradioboard.com/rb/viewtopic.php?f=4&t=6891

On Wednesday, July 6, 2016 10:01 AM, "kc2siz@... [regenrx]"
<kc2siz@gmail.com[regenrx]> <regenrx@yahoogroups.com>
<regenrx@yahoogroups.com> wrote:

I've built several regens, both solid and hollow state. They all worked,
some better than others, but none of them have done as good a job as I'd
like at demodulating SSB signals. I'd really like to remedy this.

A friend of mine recommended that I build a twinplex for this purpose. Are
there any other circuits you'd suggest? I don't care whether it uses tubes
or transistors so long as it's a strong performer on SSB.

Steve

Posted by: Richard <brunneraa1p@...>

Reply via web post
<https://groups.yahoo.com/neo/groups/regenrx/conversations/messages/26813;_ylc=X3oDMTJyaGp
1NXFrBF9TAzk3MzU5NzE0BGdycElkAzEzOTk2OTA3BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAMyNjgxMwRzZWMDZ
nRyBHNsawNycGx5BHN0aW1lAzE0Njg0NTY5MDQ-?act=reply&messageNum=26813>
• Reply to sender
<brunneraa1p@...?subject=Re%3A%20%5Bregenrx%5D%20My%20next%20project%2E%2E%2Ea%20twinplex%
3F>
• Reply to group
<regenrx@yahoogroups.com?subject=Re%3A%20%5Bregenrx%5D%20My%20next%20project%2E%2E%2Ea%20t
winplex%3F>
• Start a New Topic
<https://groups.yahoo.com/neo/groups/regenrx/conversations/newtopic;_ylc=X3oDMTJmc2ZicTJoB
F9TAzk3MzU5NzE0BGdycElkAzEzOTk2OTA3BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNudHBjBHN0aW1
lAzE0Njg0NTY5MDQ->
• Messages in this topic
<https://groups.yahoo.com/neo/groups/regenrx/conversations/topics/26765;_ylc=X3oDMTM3cGh1Z
mpsBF9TAzk3MzU5NzE0BGdycElkAzEzOTk2OTA3BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAMyNjgxMwRzZWMDZnR
yBHNsawN2dHBjBHN0aW1lAzE0Njg0NTY5MDQEdHBjSWQDMjY3NjU->
(13)

Have you tried the highest rated email app? <https://yho.com/1wwmgg>
With 4.5 stars in iTunes, the Yahoo Mail app is the highest rated email app
on the market. What are you waiting for? Now you can access all your
inboxes (Gmail, Outlook, AOL and more) in one place. Never delete an email
again with 1000GB of free cloud storage.

"In the interest of Regenerating radio's lost art of Regeneration"
Visit Your Group
<https://groups.yahoo.com/neo/groups/regenrx/info;_ylc=X3oDMTJmb284cGRkBF9TAzk3MzU5NzE0BGd
ycElkAzEzOTk2OTA3BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDdnRsBHNsawN2Z2hwBHN0aW1lAzE0Njg0NTY5MDQ->

[image: Yahoo! Groups]
<https://groups.yahoo.com/neo;_ylc=X3oDMTJlcDhhbDdvBF9TAzk3NDc2NTkwBGdycElkAzEzOTk2OTA3BGd
ycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNnZnAEc3RpbWUDMTQ2ODQ1NjkwNA-->
• Privacy <https://info.yahoo.com/privacy/us/yahoo/groups/details.html> •

Unsubscribe <regenrx-unsubscribe@yahoogroups.com?subject=Unsubscribe> • Terms of Use <https://info.yahoo.com/legal/us/yahoo/utos/terms/>

.

26817. Re: [regenrx] single 9 volt battery supply for TL072 in HONEYTONE amplifier 2

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-14 07:26:43 UTC
From: J Ed
Topic: 26789 Message: 26817

Most dual op-amps have identical pinouts and the circuits used are somewhat standard. You'll see the same circuits in many different devices.

Anywho, the opamp VCC+ and VCC- are connected to the +9v and 0v points, respectively. Then one of the inputs are referenced to a voltage that's roughly 1/2 VCC. That's where the 56K, 47K, and 1K resistor come in. They float the input at 1/2 VCC and make the opamp think it's hooked up to a +/- 4.5v supply. Notice that in dual supply circuits, the inputs are all referenced to ground.

Ed AE7TE

On Wed, Jul 13, 2016 at 7:32 PM, Rob roomberg@... [regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> I'm sure I messed up that logic real good.
>
> I definitely am missing something here......not knowing where pin 4 (Vcc-)
> gets attached to the 9 volt battery or if it needs to be attached to a
> voltage divider pair of resistors.
>
>
>
>
> On 07/13/2016 03:39 PM, Mangrove mangrove@... [regenrx] wrote:
>
>
> Rob,
>
> Both TL702 op amps have their + inputs biased to roughly 4.5V using the
> voltage divider resistors on the upper right hand side of the schematic.
> Their outputs are tied (through resistors) to their - inputs; hence their
> outputs are biased to the same 4.5V since the - inputs track the + inputs
> to a very small voltage delta.
>
> I suspect the whole circuit including the two TL702 operate off a 9V power
> supply.
>
> Thang Le
>
> Sent from my iPad
>
> On Jul 13, 2016, at 12:16, Rob roomberg@... [regenrx] <

> regenrx@yahoogroups.com> wrote:
>
>
>
> This schematic shows TL072 opamp but does not show the battery connection
> to the opamp.
> Which confuses me because I thought the TL072 needed a dual power
> supply... plus 9 and minus 9 volts using ground in the middle. The
> HONEYTONE amp only uses one 9 volt battery so how did they do that?
> Is it merely a matter of connecting the one 9volt battery to pin 4 -VE
> ..... and pin 8 +VE of the TL072 ?
>
>
>
>
>
> On 07/13/2016 02:36 PM, Rob roomberg@... [regenrx] wrote:
>
>
>
> THANK YOU!!!!!!!
>
>
> On 07/13/2016 11:02 AM, kf8zn@... [regenrx] wrote:
>
>
>
> I would say your issue is one of inadequate gain.
> The Schematic for the Honeytone is attached.
>
> It uses 2 stages of opamp amplification with an overall voltage gain up to
> 200 (46db), prior to the TDA7052.
> Your MPF102 preamp likely has a voltage gain of 2-3 db.
>
>
>
>
>
>
>

26818. Re: [regenrx] single 9 volt battery supply for TL072 in HONEYTONE amplifier 3

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-14 08:10:09 UTC
From: Rob
Topic: 26789 Message: 26818

YES... but
huh
wadaminute........
OK
sort of maybe..... I got it now.

I had to revisit TEXAS INSTRUMENTS Single Supply Op Amp Design Techniques
application note SLOA030A.

On 07/14/2016 03:26 AM, J Ed jedwardsat1@... [regenrx] wrote:
> Most dual op-amps have identical pinouts and the circuits used are
> somewhat standard. You'll see the same circuits in many different
> devices.
>
> Anywho, the opamp VCC+ and VCC- are connected to the +9v and 0v
> points, respectively. Then one of the inputs are referenced to a
> voltage that's roughly 1/2 VCC. That's where the 56K, 47K, and 1K
> resistor come in. They float the input at 1/2 VCC and make the opamp
> think it's hooked up to a +/- 4.5v supply. Notice that in dual supply
> circuits, the inputs are all referenced to ground.
>
> Ed AE7TE
>
> On Wed, Jul 13, 2016 at 7:32 PM, Rob roomberg@...
> <mailto:roomberg@...> [regenrx] <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>> wrote:
>
> I'm sure I messed up that logic real good.
>
> I definitely am missing something here......not knowing where pin
> 4 (Vcc-) gets attached to the 9 volt battery or if it needs to be
> attached to a voltage divider pair of resistors.
>
>
>
>
> On 07/13/2016 03:39 PM, Mangrove mangrove@...
> <mailto:mangrove@...> [regenrx] wrote:
>> Rob,
>>
>> Both TL702 op amps have their + inputs biased to roughly 4.5V
>> using the voltage divider resistors on the upper right hand side
>> of the schematic. Their outputs are tied (through resistors) to
>> their - inputs; hence their outputs are biased to the same 4.5V

>> since the - inputs track the + inputs to a very small voltage delta.
>>
>> I suspect the whole circuit including the two TL702 operate off a
>> 9V power supply.
>>
>> Thang Le
>>
>> Sent from my iPad
>>
>> On Jul 13, 2016, at 12:16, Rob roomberg@...
>> <mailto:roomberg@...> [regenrx] <regenrx@yahoogroups.com
>> <mailto:regenrx@yahoogroups.com>> wrote:
>>
>>> This schematic shows TL072 opamp but does not show the battery
>>> connection to the opamp.
>>> Which confuses me because I thought the TL072 needed a dual
>>> power supply... plus 9 and minus 9 volts using ground in the
>>> middle. The HONEYTONE amp only uses one 9 volt battery so how
>>> did they do that?
>>> Is it merely a matter of connecting the one 9volt battery to
>>> pin 4 -VE ..... and pin 8 +VE of the TL072 ?
>>>
>>>
>>>
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>>>
>>> On 07/13/2016 02:36 PM, Rob roomberg@...
>>> <mailto:roomberg@...> [regenrx] wrote:
>>>>
>>>> THANK YOU!!!!!!!
>>>>
>>>>
>>>> On 07/13/2016 11:02 AM, kf8zn@...
>>>> <mailto:kf8zn@...> [regenrx] wrote:
>>>>>
>>>>> I would say your issue is one of inadequate gain.
>>>>>
>>>>> The Schematic for the Honeytone is attached.
>>>>>
>>>>> It uses 2 stages of opamp amplification with an overall
>>>>> voltage gain up to 200 (46db), prior to the TDA7052.
>>>>> Your MPF102 preamp likely has a voltage gain of 2-3 db.
>>>>
>>>
>>
>>
>>

26819. 716 regen then LM386 pre-amp then TDA7052 plays CW

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-14 08:27:25 UTC
From: Rob
Topic: 26819 Message: 26819

I got the TDA7052 to play CW at good comfortable audio level by adding
an LM386 kit as a pre-amp.

http://www.learnmorsecode.com/help/LM386amp.JPG

so KF8ZN made the winning call here.

I've been down this path before.....
used the LM386 kit to pre-amp a circuit then built a transitor pre-amp.
http://www.learnmorsecode.com/help/cwpmosfet.html

I would still like to see what everybody else builds with these TDA7052
chips.

It was very discouraging to spend weeks kicking the tires on this one
but now that I heard CW
without the guitar amplifier I can move on.

On 07/13/2016 11:02 AM, kf8zn@... [regenrx] wrote:
>
>
> I would say your issue is one of inadequate gain.
> The Schematic for the Honeytone is attached.
> It uses 2 stages of opamp amplification with an overall voltage gain
up to 200 (46db), prior to the TDA7052.
> Your MPF102 preamp likely has a voltage gain of 2-3 db.

26820. Re: My next project...a twinplex?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-14 10:38:48 UTC
From: dawmast@...
Topic: 26765 Message: 26820

Another regenerative receiver with a singe coil is a circuit which is based upon the MC1648 VFO IC. It also has the two transistor emitter coupled oscillator, which is a very versatile oscillator circuit.

Schematic:

t http://www.uploadarchief.net/files/download/mc1648-type%20regen%282%29.gif
http://www.uploadarchief.net/files/download/mc1648-type%20regen%282%29.gif

http://www.uploadarchief.net/files/download/mc1648-type%20regen%282%29.gif

http://www.uploadarchief.net/files/download/mc1648-ty...
http://www.uploadarchief.net/files/download/mc1648-type%20regen%282%29.gif

View on www.uploadarchief.net
http://www.uploadarchief.net/files/download/mc1648-type%20regen%282%29.gif
Preview by Yahoo

26821. Re: 716 regen then LM386 pre-amp then TDA7052 plays CW

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-14 12:12:30 UTC
From: kf8zn@...
Topic: 26819 Message: 26821

Rob,
No worries! That's how we learn.

I have some TL072's I plan to use as the front end for the Amp you are sending. 1 tlo72 configured with a gain of 100x (40dB)

It's all in the math.

50 microvolts (S9 on a properly calibrated S meter)
equals -73dBm (note: MINUS 73dBM)

1 watt= 30 dBm

SO.... Ballpark 100 dB of required gain from antenna to speaker.

Mike AC2Q

26822. Re: 716 regen then LM386 pre-amp then TDA7052 plays CW

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-14 12:18:44 UTC
From: kf8zn@...
Topic: 26819 Message: 26822

Rob,
I also feel compelled to note that the LM386 circuit you are using is the most common, and NOISIEST, out there.

I encourage all to try the circuit referenced below.

I have built it, and can vouch for very stable gain of 50dB.

All IC Audio Amp http://www.qsl.net/qrp/acc/lm386.htm

All IC Audio Amp http://www.qsl.net/qrp/acc/lm386.htm LM386 is very popular IC also in Japan. It is used in Radio receiver. The power of it (500mW) is enough for the personal use. But sometimes, the gain of it (40dB) is not enough.

View on www.qsl.net http://www.qsl.net/qrp/acc/lm386.htm
Preview by Yahoo

26823. Re: [regenrx] Re: My next project...a twinplex? Did you build this

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-14 19:04:55 UTC
From: Rob
Topic: 26765 Message: 26823

Did you build this?

On 07/14/2016 06:38 AM, dawmast@... [regenrx] wrote:
>
> Another regenerative receiver with a singe coil is a circuit which is
> based upon the MC1648 VFO IC. It also has the two transistor emitter
> coupled oscillator, which is a very versatile oscillator circuit.
>
>
> Schematic:
>
> t
> http://www.uploadarchief.net/files/download/mc1648-type%20regen%282%29.gif
>
>
>
>
> image
> <http://www.uploadarchief.net/files/download/mc1648-type%20regen%282%29.gif>
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>
> http://www.uploadarchief.net/files/download/mc1648-ty...
> <http://www.uploadarchief.net/files/download/mc1648-type%20regen%282%29.gif>
>
>
> View on www.uploadarchief.net
> <http://www.uploadarchief.net/files/download/mc1648-type%20regen%282%29.gif>
>
>
> Preview by Yahoo
>
>

26824. Re: [regenrx] Re: My next project...a twinplex? Did you build this

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-14 19:44:09 UTC
From: Thang Le
Topic: 26765 Message: 26824

Rob,

No I didn't build the receiver in the quoted link.
It's interesting, though.

TL

On Thu, Jul 14, 2016 at 12:04 PM, Rob roomberg@... [regenrx] <
regenrx@yahoogroups.com> wrote:

>
>
> Did you build this?
>
>
> On 07/14/2016 06:38 AM, dawmast@... [regenrx] wrote:
>
>
>
> Another regenerative receiver with a singe coil is a circuit which is
> based upon the MC1648 VFO IC. It also has the two transistor emitter
> coupled oscillator, which is a very versatile oscillator circuit.
>
>
> Schematic:
>
> t
> http://www.uploadarchief.net/files/download/mc1648-type%20regen%282%29.gif
>
>
> [image: image]
> <http://www.uploadarchief.net/files/download/mc1648-type%20regen%282%29.gif>
>
>
> <http://www.uploadarchief.net/files/download/mc1648-type%20regen%282%29.gif>
> http://www.uploadarchief.net/files/download/mc1648-ty...
>
> View on www.uploadarchief.net
> <http://www.uploadarchief.net/files/download/mc1648-type%20regen%282%29.gif>
> Preview by Yahoo
>
>
>
>
>
>

--
Thang Le
mangrove@...
Wherever you go, there you are...

26825. TCA 440

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-15 16:03:59 UTC
From: kf8zn@...
Topic: 26825 Message: 26825

I recently happened upon a few of these IC's.

Anyone ever built a radio around one?

Mike AC2Q

26826. Re: [regenrx] TCA 440

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-15 16:12:35 UTC
From: Michael
Topic: 26825 Message: 26826

A bit dated, but golddust in their time!
I built a German kit which worked well.
Circuits on the web, which would still
be "competitive" for CW and SSB.

Michael
8339

On 15.07.16 17:03, kf8zn@... [regenrx] wrote:
>
> I recently happened upon a few of these IC's.
> Anyone ever built a radio around one?
> Mike AC2Q

26827. Re: [regenrx] TDA7052 amp chips tinkerers

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-16 03:06:14 UTC
From: Rob
Topic: 26789 Message: 26827

mailed today

On 07/12/2016 05:29 PM, William Wood ke9xq@... [regenrx] wrote:
>
> Sorry I?m late on your offer OM
>
> But if it is possible would like to get in on this?
> Been out of town last week, and the week before
> and this week been fairly busy, but I would
> appreciate the chance to play with these?
>
> Just set up my Pixie to build too, and sent off for
> the receiver kit from that latest QST article, so should
> be able to do some building this next few weeks :)
>
> Not been paying too much attention to all the mails
> of late either, so if you have a charge for this I?ll
> be happy to chip in OM!
>
> Thanks for doing this
> 73
> Bill KE9XQ
>
> William Wood
> W2788 Birch Lane
> La Crosse, WI 54601
>
>
> On Jul 12, 2016, at 3:49 PM, Rob roomberg@...
> <mailto:roomberg@...> [regenrx] <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>> wrote:
>
>> I got five tinkerers on the chip offer
>> so today I mailed a package to each of you containing
>> 1 TDA7052
>> 1 TDA7052A
>> 1 MPF102
>> 2 7.16 ceramic resonators
>> 1 1uF monolithic chip cap
>> 1 .1uF poly cap
>>
>> the 5 tinkerers:
>>
>> David Adams
>> Jimmy D Hill

>> Bob Liesenfeld WB0POQ
>> Thang Le
>> Mike Haydon
>>
>> should see the package in 3 days.
>>
>
>

26828. TDA7052 amp chips tinkerers today

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-16 03:10:59 UTC
From: Rob
Topic: 26789 Message: 26828

that was supposed to say mailed TWO today
William Wood
La Crosse, WI
and

Glen N8WE
Centerville, Ohio

26829. Re: [regenrx] TCA 440

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-16 12:08:35 UTC
From: kf8zn@...
Topic: 26825 Message: 26829

If you know of circuits you would share, i'd appreciate it.

The only circuit I have found is dubbed the angwheel.

The ANGwheel - Mini QRP Transceiver - PA3ANG - Dutch Ham Radio Station - Weblog
http://pa3ang.nl/wp/archives/221

http://pa3ang.nl/wp/archives/221

The ANGwheel - Mini QRP Transceiver - PA3ANG - D... http://pa3ang.nl/wp/archives/221 The Wheel is a DSB Transceiver for 80, 40 or 20 Meter Klik hier voor een Nederlandse versie. Size 100 x 43 x 130 mm Sound fragments BQC Net. Tuning...

View on pa3ang.nl http://pa3ang.nl/wp/archives/221
Preview by Yahoo

26830. Sussex NJ Ham Show

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-16 12:31:57 UTC
From: johnhutnick@...
Topic: 26830 Message: 26830

For all of us who have run out of supplies from building so much, The Sussex Amateur Radio Club has its big annual summer show tomorrow at 8am(or 6am if you have radio stuff coming out the doors and you want to sell). At Sussex County Fairgrounds -
http://scarcnj.org/hamfest/pdfs/SCARC-Hamfest-2016.pdf
http://scarcnj.org/hamfest/pdfs/SCARC-Hamfest-2016.pdf

26831. Re: [regenrx] TCA 440

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-16 14:56:28 UTC
From: Michael
Topic: 26825 Message: 26831

The PA2ANG schematic is viable, but there are less
complex options. I have a folder with TCA 440 implementations...
Without having checked current online availability,
I suggest searching the following:-

HRX 80
DK1HE Miss Moskita
DK1HE-Monoband-TRX "Sparrow" (qrpproject.de)
HB9BWY (Sprat 102)
RadCom 12/83 ; 06/91 ; 05/80
cq-DL 8/80 p 380 ; 12/82 P586 et al
www.kolumbus.fi/oh2aun/tca150.gif
Silicium Microelectronic Integration GMbH, edition 12/95

Hopefully, you will find something useful!

If needed, I could scan and email some schematics to
someone canny enough to upload them to the group...

Michael
UK

On 16.07.16 13:08, kf8zn@... [regenrx] wrote:
>
>
> If you know of circuits you would share, i'd appreciate it.
>
> The only circuit I have found is dubbed the angwheel.
>
> The ANGwheel - Mini QRP Transceiver - PA3ANG - Dutch Ham Radio Station -
> Weblog <http://pa3ang.nl/wp/archives/221>
>
> > image <http://pa3ang.nl/wp/archives/221>
>
> The ANGwheel - Mini QRP Transceiver - PA3ANG - D...
> <http://pa3ang.nl/wp/archives/221>
> The Wheel is a DSB Transceiver for 80, 40 or 20 Meter Klik hier voor een
> Nederlandse versie. Size 100 x 43 x 130 mm Sound fragments BQC Net.
> Tuning...
>
> View on pa3ang.nl <http://pa3ang.nl/wp/archives/221>

26832. Mk.22

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-16 19:18:18 UTC
From: Leonard Meek
Topic: 26832 Message: 26832

Ever since I was a kid and submini tubes were being invented, I've wanted to build a radio using them. My first real attempt was my Mk.19, a 3 tube MW regen. It worked surprisingly well at first, but started to degrade. It may have been the batteries or the proxomity tubes I was using. Anyhow, I decided to build a better radio, using 5 hearing aid tubes. From the start there were problems, mainly with my eyesight but also with the small size of everything. It was like trying to thread a needle while wearing boxing gloves. I used a mini output xfmr that had a Z of 2500 ohms imto an 8 ohm speaker. But the 5672 needed a 20K ohm load. I had a 45 ohm speaker that would bring the load Z up to 15K ohms, not enough but better. The performance won't make any headlines, and it definitely shows the limitations of my abilities. I'll post a schematic of what I have so far.

26833. Email account

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-16 23:12:38 UTC
From: Leonard Meek
Topic: 26833 Message: 26833

I guess I won't be posting any more stuff. I tried to get into the Yahoo thing and it says my account has been cancelled.

Leonard

26834. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-16 23:44:57 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 26834

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Leonard's Stuff/Mod 3.bmp
Uploaded by : leonardmeek <lemeek@...>
Description : Schematuc

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Leonard%27s%20Stuff/Mod%203.bmp

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

leonardmeek <lemeek@...>

26835. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-16 23:47:25 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 26835

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Leonard's Stuff/Mk.22.bmp
Uploaded by : leonardmeek <lemeek@...>
Description : Mod 3

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Leonard%27s%20Stuff/Mk.22.bmp

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

leonardmeek <lemeek@...>

26836. Re: [regenrx] Email account

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-16 23:47:25 UTC
From: Phil
Topic: 26833 Message: 26836

Leonard,

Your message came through FB, so it looks like it's still working. . .

73 From "The Beaconeer's Lair"
Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)

HF/LF RADIOS:
Grundigs: S-350 (~2006), G6 (2011) & S450DLX (2014).
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
Icom: IC-735 Transceiver (~1990).
Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
Icom: IC-7200 Transceiver (~2015).
R-Shack: DX-380 digital portable (~1990).
SDR: Softrock Ensemble II LF (built from a kit 2015).
Zenith: Royal-7000 Transoceanic Portable (~1968).

ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 4 Port Multicoupler, Feeds Antenna to 4 RX's.
HOMEBREW 8 Hz Audio Filter.
Timewave DSP-599zx Audio Filter.
Behringer 1202fx Audio Mixer (for mixing/routing audio).

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

On 7/16/2016 11:12 PM, 'Leonard Meek' lemeek@... [regenrx]
wrote:
> I guess I won't be posting any more stuff. I tried to get into the Yahoo
> thing and it says my account has been cancelled.
>
> Leonard
>
>

26837. Re: [regenrx] Email account

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-16 23:57:49 UTC
From: Leonard Meek
Topic: 26833 Message: 26837

Okay, I'm in now. It's just like the pill bottles, "senior proof."

Leonard

26838. Re: [regenrx] Mk.22

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-17 01:02:04 UTC
From: Rob
Topic: 26832 Message: 26838

Can you take pictures of the insides of this radio?
I got the schematic.
Thank you.

On 07/16/2016 03:18 PM, 'Leonard Meek' lemeek@... [regenrx]
wrote:
> Ever since I was a kid and submini tubes were being invented, I've wanted to
> build a radio using them. My first real attempt was my Mk.19, a 3 tube MW
> regen. It worked surprisingly well at first, but started to degrade. It may
> have been the batteries or the proxomity tubes I was using. Anyhow, I
> decided to build a better radio, using 5 hearing aid tubes. From the start
> there were problems, mainly with my eyesight but also with the small size of
> everything. It was like trying to thread a needle while wearing boxing
> gloves. I used a mini output xfmr that had a Z of 2500 ohms imto an 8 ohm
> speaker. But the 5672 needed a 20K ohm load. I had a 45 ohm speaker that
> would bring the load Z up to 15K ohms, not enough but better. The
> performance won't make any headlines, and it definitely shows the
> limitations of my abilities. I'll post a schematic of what I have so far.
>
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> "In the interest of Regenerating radio's lost art of Regeneration"
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> Yahoo Groups Links
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26839. Re: [regenrx] Mk.22

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-17 04:10:17 UTC
From: Leonard Meek
Topic: 26832 Message: 26839

Rob, I posted photos in the Photo section. You may have to dig to find them though. I haven't figured out how it works yet.

Leonard

----- Original Message -----
From: "Rob roomberg@... [regenrx]" <regenrx@yahoogroups.com>
To: <regenrx@yahoogroups.com>
Sent: Saturday, July 16, 2016 3:02 PM
Subject: Re: [regenrx] Mk.22

> Can you take pictures of the insides of this radio?
> I got the schematic.
> Thank you.
>
> On 07/16/2016 03:18 PM, 'Leonard Meek' lemeek@... [regenrx]
> wrote:
>> Ever since I was a kid and submini tubes were being invented, I've wanted
>> to
>> build a radio using them. My first real attempt was my Mk.19, a 3 tube MW
>> regen. It worked surprisingly well at first, but started to degrade. It
>> may
>> have been the batteries or the proxomity tubes I was using. Anyhow, I
>> decided to build a better radio, using 5 hearing aid tubes. From the
>> start
>> there were problems, mainly with my eyesight but also with the small size
>> of
>> everything. It was like trying to thread a needle while wearing boxing
>> gloves. I used a mini output xfmr that had a Z of 2500 ohms imto an 8 ohm
>> speaker. But the 5672 needed a 20K ohm load. I had a 45 ohm speaker that
>> would bring the load Z up to 15K ohms, not enough but better. The
>> performance won't make any headlines, and it definitely shows the
>> limitations of my abilities. I'll post a schematic of what I have so far.
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> "In the interest of Regenerating radio's lost art of Regeneration"
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26840. 716 regen then LM386 driving speaker..... no TDA7052

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-17 05:38:34 UTC
From: Rob
Topic: 26819 Message: 26840

I got the 716 regen then LM386 driving speaker..... no TDA7052
based on the JF10ZL circuit:
http://www.qsl.net/qrp/acc/lm386.htm

I used a 5K pot where the volume control is done by pin 1.
JF10ZL says to use 3 to 1,000 ohms to control the volume.
I didn't have any variable resistors smaller than 5K.

http://www.learnmorsecode.com/716/lm386.html

I definitely did get the desired result.

On 07/14/2016 08:18 AM, kf8zn@... [regenrx] wrote:
>
> Rob,
> I also feel compelled to note that the LM386 circuit you are using is
> the most common, and NOISIEST, out there.
>
> I encourage all to try the circuit referenced below.
>
> I have built it, and can vouch for very stable gain of 50dB.
>
> All IC Audio Amp <http://www.qsl.net/qrp/acc/lm386.htm>
>
>
>
>
> All IC Audio Amp <http://www.qsl.net/qrp/acc/lm386.htm>
> LM386 is ve ry popular IC also in Japan. It is used in Radio receiver.
> The power of it (500mW) is enough for the personal use. But sometimes,
> the gain of it (40dB) is not enough.
>
> View on < span style="font-weight:bold;">www.qsl.net
> <http://www.qsl.net/qrp/acc/lm386.htm>
>
> Preview by Yahoo
>
>

26841. Re: 716 regen then LM386 driving speaker..... no TDA7052

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-17 13:17:55 UTC
From: kf8zn@...
Topic: 26819 Message: 26841

OUTSTANDING!

That Gentleman's webpage contains a lot of good info!

How high in gain (or low in resistance) are you able to go without instability?

If you would post a photo of the actual build I'd appreciate it

Mike AC2Q

26842. Re: [regenrx] Mk.22

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-17 15:31:28 UTC
From: Michael
Topic: 26832 Message: 26842

Brilliantissimo, Leonard!

All it needs now is more tubes, fewer Rs and Cs
and I could probably build it...

We all tremble at the fate of the Yahoo newbie
who dared to momentarily exterminate you...

Michael

On 17.07.16 05:10, 'Leonard Meek' lemeek@... [regenrx] wrote:
> Rob, I posted photos in the Photo section. You may have to dig
> to find them though. I haven't figured out how it works yet.
...
>>> have been the batteries or the proxomity tubes I was using. Anyhow, I
>>> decided to build a better radio, using 5 hearing aid tubes. From the
>>> start there were problems, mainly with my eyesight but also with
>>> the small size of everything.

26843. Re: [regenrx] Re: 716 regen then LM386 driving speaker..... no TDA7052

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-17 16:03:49 UTC
From: Rob
Topic: 26819 Message: 26843

lots of pictures:

http://www.learnmorsecode.com/716/lm386.html

http://www.learnmorsecode.com/716/716.html

On 07/17/2016 09:17 AM, kf8zn@... [regenrx] wrote:
>
> OUTSTANDING!
>
>
> That Gentleman's webpage contains a lot of good info!
>
> How high in gain (or low in resistance) are you able to go without
> instability?
>
> If you would post a photo of the actual build I'd appreciate it
>
> Mike AC2Q
>
> ---
> Posted by: kf8zn@...
> ---
> <https://groups.yahoo.com/neo/groups/regenrx/conversations/messages/26841;_ylc=X3oDMTJyMzNrZ3ZwBF9TAzk3MzU5NzE0BGdycElkAzEzOTk2OTA3BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAMyNjg0MQRzZWMDZnRyBHNsawNycGx5BHN0aW1lAzE0Njg3NjE0NzY-?act=reply&messageNum=26841>
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26844. Re: 716 regen then LM386 driving speaker..... instability

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-17 16:12:25 UTC
From: Rob
Topic: 26819 Message: 26844

On 07/17/2016 09:17 AM, kf8zn@... [regenrx] wrote:
>
> OUTSTANDING!
>
>
> That Gentleman's webpage contains a lot of good info!
>
> How high in gain (or low in resistance) are you able to go without
> instability?
>

I will be examining that measurement today.
It was some midnight science to make it work and it did
have a threshold it would cross that would scream a really
high pitch screeching mixed with the CW audio.
I thought that perhaps I should record it and share that recording with
you wizards and
someone would explain what I needed to do to fix that screech.
My first thought was that there was an RF choke solution somewhere in
the audio chain.

> If you would post a photo of the actual build I'd appreciate it
>
> Mike AC2Q
>

26845. Re: [regenrx] Mk.22

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-17 17:44:43 UTC
From: Leonard Meek
Topic: 26832 Message: 26845

Perfomance is not great, but it's close to the prediction based on the measured tube characteristics. The total filament current is about 0.5 amps and pulls the battery voltage down to 1.1 volts. Total plate current is about 2.2 mA. I haven't tried it with my bench supply but I suspect it would work a little better, if it didn't pick up AC hum. I don't think I would attempt this kind of construction again. My eyesight can't handle it. Beats me how guys can do surface mount stuff.

Leonard

----- Original Message -----
From: "Michael michael.setaazul@... [regenrx]"
<regenrx@yahoogroups.com>
To: <regenrx@yahoogroups.com>
Sent: Sunday, July 17, 2016 5:31 AM
Subject: Re: [regenrx] Mk.22

> Brilliantissimo, Leonard!
>
> All it needs now is more tubes, fewer Rs and Cs
> and I could probably build it...
>
> We all tremble at the fate of the Yahoo newbie
> who dared to momentarily exterminate you...
>
> Michael
>
>
> On 17.07.16 05:10, 'Leonard Meek' lemeek@... [regenrx] wrote:
>> Rob, I posted photos in the Photo section. You may have to dig
>> to find them though. I haven't figured out how it works yet.
> ...
>>>> have been the batteries or the proxomity tubes I was using. Anyhow, I
>>>> decided to build a better radio, using 5 hearing aid tubes. From the
>>>> start there were problems, mainly with my eyesight but also with
>>>> the small size of everything.
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> "In the interest of Regenerating radio's lost art of Regeneration"
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> Yahoo Groups Links
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26846. TDA 7052 Amp 716 circuit regeneration resistors and pots

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-17 19:56:20 UTC
From: Rob
Topic: 26846 Message: 26846

PICTURES and detail here:
http://www.learnmorsecode.com/716/716.html

The original circuit was this one:
http://www.learnmorsecode.com/716/ceregen202.jpg
Note the chain of resistors labeled REGENERATION
went from the PLUS VOLTS rail to
220K resistor then
50K pot then
4.7M resistor

I had ZERO audio regeneration and heard no radio stations or CW when I
had the
220K resistor in line.
So I removed the 220K resistor and then heard CW.

Note that the 50K resistor goes from PLUS VOLTS to GROUND with the tap
in the middle.
I did not have a 50K pot so I used TWO 20K pots in series with the tap
in between the
two pots.

I got CW reception using both 20K pots set at 7K ohms
then found that replacing both pots with 5.6K resistors heard CW
so I left out the bottom 20K pot and now use 10K of the top pot:

http://www.learnmorsecode.com/716/VK3YEmodKB3BYTv2.jpg

Its all just an experiment for me.
I'm still learning why it works.

On 07/17/2016 02:44 PM, JD Hill wrote:
>
>
> On Jul 17, 2016 9:22 AM, w9jdh.qrp@...
> <mailto:w9jdh.qrp@...> wrote:
> >
> > Hi Rob. I received the parts Saturday and will begin the tinker
> > phase probably tomorrow. I have to spend a little time trying to
> clean off some room on the bench. I will keep you informed of progress.
> >
> > I do have a question regarding the regen. The 20 k pots have me
> scratching my head a bit . are they a double gang pot for a
> 'balancing' purpose or are they actually a single piece? I already
> have a regen that I made a couple of years ago . I May use it to get
> a signal to try the amp then proceed with the regen using the ceramic
> resonater.

>
> 72 for now
> Jimmy, W9JDH
>

26847. Re: [regenrx] TDA 7052 Amp 716 circuit regeneration resistors and pots

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-18 03:56:14 UTC
From: Alvin Schmitt
Topic: 26846 Message: 26847

Your regeneration circuit is just a transistor bias circuit. Alvin P. Schmitt

APSTRON LLC
P.O. Box 201Newport VA 24128-0201

1-888-730-6478
http://www.apsministries.org/

On Sunday, July 17, 2016 3:56 PM, "Rob roomberg@... [regenrx]" <regenrx@yahoogroups.com> wrote:

  PICTURES and detail here:
http://www.learnmorsecode.com/716/716.html

The original circuit was this one:
http://www.learnmorsecode.com/716/ceregen202.jpg
Note the chain of resistors labeled REGENERATION
went from the PLUS VOLTS rail to
220K resistor then
50K pot then
4.7M resistor

I had ZERO audio regeneration and heard no radio stations or CW when I had the
220K resistor in line.
So I removed the 220K resistor and then heard CW.

Note that the 50K resistor goes from PLUS VOLTS to GROUND with the tap in the middle.
I did not have a 50K pot so I used TWO 20K pots in series with the tap in between the
two pots.

I got CW reception using both 20K pots set at 7K ohms
then found that replacing both pots with 5.6K resistors heard CW
so I left out the bottom 20K pot and now use 10K of the top pot:

http://www.learnmorsecode.com/716/VK3YEmodKB3BYTv2.jpg

Its all just an experiment for me.
I'm still learning why it works.

On 07/17/2016 02:44 PM, JD Hill wrote:

On Jul 17, 2016 9:22 AM, w9jdh.qrp@... wrote:
>
> Hi Rob. I received the parts Saturday and will begin the tinker
> phase probably tomorrow. I have to spend a little time trying to clean off some room on
the bench.   I will keep you informed of progress.
>
> I do have a question regarding the regen. The 20 k pots have me scratching my head a bit

. are they a double gang pot for a 'balancing' purpose or are they actually a single piece? I already have a regen that I made a couple of years ago . I May use it to get a signal to try the amp then proceed with the regen using the ceramic resonater. 72 for now Jimmy, W9JDH

26848. 716 .....regeneration circuit is just a transistor bias circuit.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-18 05:03:07 UTC
From: Rob
Topic: 26846 Message: 26848

> Your regeneration circuit is just a transistor bias circuit.
> Alvin P. Schmitt
>
What do you mean by "JUST" a transistor bias circuit?

This image and labels were made by the circuit author:
http://www.learnmorsecode.com/716/ceregen202.jpg
but was condensed to fit..... so I'm wondering if I mucked up the labels.

I'm a hobby electronics dabbler...not an educated electronics engineer
....so
if the label REGENERATION is wrong I would like to know.

Anyone else here think REGENERATION is a mis-label that should say
TRANSISTOR BIAS CIRCUIT?

>
> PICTURES and detail here:
> http://www.learnmorsecode.com/716/716.html
>
> The original circuit was this one:
> http://www.learnmorsecode.com/716/ceregen202.jpg
> Note the chain of resistors labeled REGENERATION
> went from the PLUS VOLTS rail to
> 220K resistor then
> 50K pot then
> 4.7M resistor
>
> I had ZERO audio regeneration and heard no radio stations or CW when I
> had the
> 220K resistor in line.
> So I removed the 220K resistor and then heard CW.
>
> Note that the 50K resistor goes from PLUS VOLTS to GROUND with the tap
> in the middle.
> I did not have a 50K pot so I used TWO 20K pots in series with the tap
> in between the
> two pots.
>
> I got CW reception using both 20K pots set at 7K ohms
> then found that replacing both pots with 5.6K resistors heard CW
> so I left out the bottom 20K pot and now use 10K of the top pot:
>
> http://www.learnmorsecode.com/716/VK3YEmodKB3BYTv2.jpg
>
> Its all just an experiment for me.

> I'm still learning why it works.
>
>
> On 07/17/2016 02:44 PM, JD Hill wrote:
>>
>> On Jul 17, 2016 9:22 AM, w9jdh.qrp@...
>> <mailto:w9jdh.qrp@...> wrote:
>> >
>> > Hi Rob. I received the parts Saturday and will begin the tinker
>> > phase probably tomorrow. I have to spend a little time trying to
>> clean off some room on the bench. I will keep you informed of progress.
>> >
>> > I do have a question regarding the regen. The 20 k pots have me
>> scratching my head a bit . are they a double gang pot for a
>> 'balancing' purpose or are they actually a single piece? I already
>> have a regen that I made a couple of years ago . I May use it to get
>> a signal to try the amp then proceed with the regen using the ceramic
>> resonater.
>> 72 for now
>> Jimmy, W9JDH
>
>
>
>

26849. Re: [regenrx] 716 .....regeneration circuit is just a transistor bias circuit.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-18 06:28:02 UTC
From: Udo Peters
Topic: 26846 Message: 26849

Hi Rob,

the 220k resistor and 50k pot control the bias of the transistor. So,
the pot controls the regeneration of the detector circuit which
essentially is a colpits oscillator. It starts to oscillate as soon as
it gets enough base current. The pot is correctly named the regeneration
control.

73, Udo, dk3bi

Am 18.07.2016 um 07:03 schrieb Rob roomberg@... [regenrx]:
>
>> Your regeneration circuit is just a transistor bias circuit.
>> Alvin P. Schmitt
>>
> What do you mean by "JUST" a transistor bias circuit?
>
> This image and labels were made by the circuit author:
> http://www.learnmorsecode.com/716/ceregen202.jpg
> but was condensed to fit..... so I'm wondering if I mucked up the labels.
>
> I'm a hobby electronics dabbler...not an educated electronics engineer
> ....so
> if the label REGENERATION is wrong I would like to know.
>
> Anyone else here think REGENERATION is a mis-label that should say
> TRANSISTOR BIAS CIRCUIT?
>
>
>
>
>>
>> PICTURES and detail here:
>> http://www.learnmorsecode.com/716/716.html
>>
>> The original circuit was this one:
>> http://www.learnmorsecode.com/716/ceregen202.jpg
>> Note the chain of resistors labeled REGENERATION
>> went from the PLUS VOLTS rail to
>> 220K resistor then
>> 50K pot then
>> 4.7M resistor
>>
>> I had ZERO audio regeneration and heard no radio stations or CW when
>> I had the
>> 220K resistor in line.

>> So I removed the 220K resistor and then heard CW.
>>
>> Note that the 50K resistor goes from PLUS VOLTS to GROUND with the
>> tap in the middle.
>> I did not have a 50K pot so I used TWO 20K pots in series with the
>> tap in between the
>> two pots.
>>
>> I got CW reception using both 20K pots set at 7K ohms
>> then found that replacing both pots with 5.6K resistors heard CW
>> so I left out the bottom 20K pot and now use 10K of the top pot:
>>
>> http://www.learnmorsecode.com/716/VK3YEmodKB3BYTv2.jpg
>>
>> Its all just an experiment for me.
>> I'm still learning why it works.
>>
>>
>> On 07/17/2016 02:44 PM, JD Hill wrote:
>>>
>>> On Jul 17, 2016 9:22 AM, w9jdh.qrp@... wrote:
>>> >
>>> > Hi Rob. I received the parts Saturday and will begin the tinker
>>> > phase probably tomorrow. I have to spend a little time trying to
>>> clean off some room on the bench. I will keep you informed of
>>> progress.
>>> >
>>> > I do have a question regarding the regen. The 20 k pots have me
>>> scratching my head a bit . are they a double gang pot for a
>>> 'balancing' purpose or are they actually a single piece? I already
>>> have a regen that I made a couple of years ago . I May use it to
>>> get a signal to try the amp then proceed with the regen using the
>>> ceramic resonater.
>>> 72 for now
>>> Jimmy, W9JDH
>>
>>
>>
>

26850. Re: 716 .....regeneration circuit is just a transistor bias circuit.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-18 17:35:22 UTC
From: les.au49@...
Topic: 26846 Message: 26850

Regarding the point that the circuit adjusts the bias for the transistor, I think the word, "just" means this circuit is often seen. He might have written, "this is a commonly used circuit". As for labeling this pot with the words, "regen" or "regeneration" - that is an excellent choice. That word has a specific, well understood meaning. Changing the bias controls the amount of regeneration or feed-back.

I hope this explanation helps.

Les

26851. Re: 716 .....regeneration circuit is just a transistor bias circuit.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-19 23:25:11 UTC
From: dulmagedon@...
Topic: 26846 Message: 26851

Easy Rob. I felt the sting here too. Just remember anytime you actually do something a 100 "experts" will pick it apart. There is a reason for that and when you figure it out you will realize why and use that for assurance that you are probably on the right track and will just smile inside and carry on. I've had a lot worse and lived. Interesting project. donVe3LYX.

26852. FETs

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-22 19:17:09 UTC
From: daveslis2000@...
Topic: 26852 Message: 26852

I don't remember what group it was, but someone said "you can switch the drain and source".
Some you can, but there are a lot that are not symmetrical.
Just had to throw that in here.

73,
Dave

26853. Re: [regenrx] FETs

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-22 21:48:39 UTC
From: Rob
Topic: 26852 Message: 26853

Was that in the MPF102 discussion?

On 07/22/2016 03:17 PM, daveslis2000@... [regenrx] wrote:
>
> I don't remember what group it was, but someone said "you can switch
> the drain and source".
>
> Some you can, but there are a lot that are not symmetrical.
>
> Just had to throw that in here.
>
>
> 73,
>
> Dave
>
>

26854. Re: [regenrx] FETs

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-22 21:56:49 UTC
From: Tom Lee
Topic: 26852 Message: 26854

Hi Dave,

I'm very intrigued by your statement. Do you have a list of part numbers of JFETs that aren't built symmetrically? I haven't encountered one that wasn't intended to be symmetrical (it takes extra steps to make an asymmetrical JFET), so I'm eager to learn something new.

Thanks!

--Tom

--
Prof. Thomas H. Lee
Allen Bldg. Rm.205
420 Via Palou Mall
Stanford University
Stanford, CA 94305-4070
http://www-smirc.stanford.edu

On 7/22/2016 12:17 PM, daveslis2000@... [regenrx] wrote:
>
> I don't remember what group it was, but someone said "you can switch
> the drain and source".
>
> Some you can, but there are a lot that are not symmetrical.
>
> Just had to throw that in here.
>
>
> 73,
>
> Dave
>
>

26855. 716 regen print circuit board

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-22 21:57:41 UTC
From: Rob
Topic: 26855 Message: 26855

716 regen print circuit board

http://www.learnmorsecode.com/716/etch/index.html

I am truly amazed how easy this was to do.

26856. Re: [regenrx] FETs

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-22 23:51:57 UTC
From: Phil
Topic: 26852 Message: 26856

The J310 is definitely one such device (NOT symmetrical) . It's my
"go-to" device for RF amps, active whips and other such items.

You can get more info on the following two articles I have on my web
site. Written by Steve Ratzlaff, a very knowledgeable individual in the
LF (and other RF) areas. . .

http://www.qsl.net/ko6bb/j310_fet.html

http://www.qsl.net/ko6bb/jfetbias.html

73 From "The Beaconeer's Lair"
Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)

HF/LF RADIOS:
Grundigs: S-350 (~2006), G6 (2011) & S450DLX (2014).
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
Icom: IC-735 Transceiver (~1990).
Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
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ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

On 7/22/2016 9:56 PM, Tom Lee tomlee@... [regenrx] wrote:
>
> Hi Dave,
>
> I'm very intrigued by your statement. Do you have a list of part
> numbers of JFETs that aren't built symmetrically? I haven't
> encountered one that wasn't intended to be symmetrical (it takes extra
> steps to make an asymmetrical JFET), so I'm eager to learn something new.
>
> Thanks!

>
> --Tom
> --
> Prof. Thomas H. Lee
> Allen Bldg. Rm.205
> 420 Via Palou Mall
> Stanford University
> Stanford, CA 94305-4070
> http://www-smirc.stanford.edu
> On 7/22/2016 12:17 PM, daveslis2000@... [regenrx] wrote:
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>>

26857. Re: [regenrx] FETs

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-23 02:52:48 UTC
From: Tom Lee
Topic: 26852 Message: 26857

Thank you very much for the links, Phil. I am a bit puzzled, however, because I've used the J310 for a long time as well, and all the ones I've ever checked have been symmetrical (within small variations that are to be expected). I've exploited that symmetry to use the standard feedback trick to linearize them when used as voltage-controlled attenuators, and I've never had to trim the feedback resistor more than an amount roughly equal to the resistor tolerances.

I just checked the Fairchild datasheet, and it contains an explicit statement to the effect that the source and drain are interchangeable. I also see that a Clifton Labs webpage (http://www.cliftonlaboratories.com/jfet_variation.htm) contains measurements showing essentially identical V-I curves with source and drain interchanged.

Maybe you're thinking of another part, or perhaps some manufacturers make their J310s differently? Very mysterious...

--Cheers,
Tom

--
Prof. Thomas H. Lee
Allen Bldg. Rm.205
420 Via Palou Mall
Stanford University
Stanford, CA 94305-4070
http://www-smirc.stanford.edu

On 7/22/2016 4:51 PM, Phil ko6bb1@... [regenrx] wrote:
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> "go-to" device for RF amps, active whips and other such items.
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>

26858. Re: [regenrx] FETs

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-23 15:55:37 UTC
From: Paul Martin
Topic: 26852 Message: 26858

I've used J310s symmetrically as well, mostly to simplify layout. Never had a problem.

Paul

> On Jul 22, 2016, at 10:52 PM, Tom Lee tomlee@...ord.edu [regenrx] <regenrx@yahoogroups.com> wrote:
>
> Thank you very much for the links, Phil. I am a bit puzzled, however, because I've used the J310 for a long time as well, and all the ones I've ever checked have been symmetrical (within small variations that are to be expected). I've exploited that symmetry to use the standard feedback trick to linearize them when used as voltage-controlled attenuators, and I've never had to trim the feedback resistor more than an amount roughly equal to the resistor tolerances.
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26860. 716 works

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-24 02:19:53 UTC
From: Rob
Topic: 26860 Message: 26860

It works!!!!!! receiving CW tonight.

http://www.learnmorsecode.com/716/etch/0703.jpg

http://www.learnmorsecode.com/716/etch/0704.jpg

http://www.learnmorsecode.com/716/etch/0705.jpg

http://www.learnmorsecode.com/716/etch/index.html

26861. My new MW regen/synchrodyne - 9...12V power supply

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-24 06:25:21 UTC
From: krysatec@...
Topic: 26861 Message: 26861
Attachments: 5 described; binary payloads are missing from this source WARC

here is a few photos of my regen/synchrodyne (It depends on settings)
with low anode voltage 8...13V and CV3929 and audioamplifier with old Si transistors from Soviet Union and transformers from Czechoslovakia.
It is good for near stations.

Best regards, Jara "Rat", Czechia

26862. Re: RAK-7

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-24 08:29:31 UTC
From: les.au49@...
Topic: 26859 Message: 26862

Hello Mike,

First, my reply is based on the manual only. I have never owned a RAK (or RAL), and I have never measured the parameters that interest you. So - my reply depends on my understanding of the circuit - in this case for the RAK-5.

Looking at the two supplies (90 & 180V) I believe you are correct - connecting power to the 180V should supply the detector screen via dropping resistor - R117. That this connection is correct can be confirmed by checking the screen voltage against the value in the manual. (I'm sure you know this already!) Apart from a bypass capacitor, the only circuit supplied by the 90V battery is the detector screen grid (and of course the potentiometer in that circuit.)

I follow the logic of adding the current for the plate and screen supply lines. I believe you are correct. You can confirm this by monitoring the current in the B+ line between your PSU and the set. (Again, I believe you know this already).

I feel somewhat embarrassed to answer this posting, because I'm not speaking from actual measurement - only from reading the circuit diagram/manual (as you have done already). So I'm simply supporting your own (reliable) observation.

Les

26864. Using a Darlington pair as an AM detector.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-25 15:56:53 UTC
From: dawmast@...
Topic: 26864 Message: 26864

The following topics below are about regenerative receivers in which a Darlington pair is used as a (regenerative) AM-detector which is connected onto the top of a tank circuit.

* http://theradioboard.com/rb/viewtopic.php?f=4&t=4037
http://theradioboard.com/rb/viewtopic.php?f=4&t=4037 "Are Darlington
pairs suitable for using in regen receivers?"
* http://theradioboard.com/rb/viewtopic.php?f=4&t=7063
http://theradioboard.com/rb/viewtopic.php?f=4&t=7063 "SW REGEN USING
BASE-EMITTER AND MILLER CAPACITANCE FOR FEEDBACK"
* http://oernst.f5lvg.free.fr/rx/vv1/vv1.html http://oernst.f5lvg.free.fr/rx/vv1/vv1.html
"RECEPTEUR A REACTION
SPECIAL BLU"
* "Junkbox Regen" at https://circuitsalad.com/2014/12/06/another-excellent-performing-rege
n-circuit-coming-shortly https://circuitsalad.com/2014/12/06/another-excellent-performing-
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* "Variation on Junk Box Bipolar Regenerative Receiver" at
https://circuitsalad.com/2015/01/22/variation-on-junk-box-bipolar-regenerative-receiver
https://circuitsalad.com/2015/01/22/variation-on-junk-box-bipolar-regenerative-receiver

Darlington pairs used as an AM detector, are very suitable for using it in TRF and regenerative receivers, because they have a very high input impedance. This allows to connect them onto the top, or hot end, of any tank circuit. Coil taps or link coils are not necessary anymore. Very useful when using a Q-Multiplier with two-terminal coils only, think about the Colpitts and emitter-coupled oscillator topologies.

In a Darlington circuit the first transistor acts as an impedance converter, while the second transistor is the actual AM detector in which the collector has been shunted to ground for RF signal by a cap of 10 nF.

But how is the demodulation performance of Darlington detectors on higher frequencies in the shortwave range? This provided that HF-capable transistors like BF494, BF495, BF240, etc. are used.

26865. Re: [regenrx] Using a Darlington pair as an AM detector.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-25 18:22:55 UTC
From: J Ed
Topic: 26864 Message: 26865

If biased just at cutoff, should be okay; Assume the emitter current of the second transistor is 5 mA, the emitter resistance is 5.2 ohms. If you assume the HFE of each transistor is 150, the input impedance of the pair is going to be 117K in parallel with any biasing resistors. You'd want to bias the bases at 1.0 to 1.1v, just so the bases are just below conducting.

It's also possible to make a base-leak detector. Because it depends on conduction during the positive cycle, I'm not quite certain a pair would be better than a single transistor.

In either case, I'd choose a JFET over a bipolar transistor.

Ed AE7TE

On Mon, Jul 25, 2016 at 8:56 AM, dawmast@... [regenrx] <
regenrx@yahoogroups.com> wrote:

>
>
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> Darlington pair is used as a (regenerative) AM-detector which is connected
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> frequencies in the shortwave range? This provided that HF-capable
> transistors like BF494, BF495, BF240, etc. are used.
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>

26866. Re: [regenrx] Using a Darlington pair as an AM detector.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-25 19:10:18 UTC
From: Jim Scott
Topic: 26864 Message: 26866

FWIW,

A not so obvious problem with using Darlington pair transistors is that the tradeoff for the high gain is bandwidth.

It is true that the gain of the transistor pair is essentially the product of the Betas of the two transistors, but the input capacitance is the sum of the capacitance of the first transistor, and Beta x the capacitance of the second transistor.

Darlington devices are not fast.

If you use a FET for the first stage you can overcome this somewhat and get the high impedance you want.

Best regards,
Jim Scott

Scott Electronic Systems, Inc.
310 S. Wall Ave.
Joplin, MO 64801 USA
PH: 417-781-2211
FAX: 781-2234

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in this email is to be copied, relayed, or disseminated, by
any means, without the consent of the author.

-----Original Message-----
From: dawmast@... [regenrx] [mailto:regenrx@yahoogroups.com]
Sent: Monday, July 25, 2016 10:56 AM
To: regenrx@yahoogroups.com
Subject: [regenrx] Using a Darlington pair as an AM detector.

The following topics below are about regenerative receivers in which a Darlington pair is used as a (regenerative) AM-detector which is connected onto the top of a tank circuit.

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In a Darlington circuit the first transistor acts as an impedance converter, while the second transistor is the actual AM detector in which the collector has been shunted to ground for RF signal b! y a cap of 10 nF.

But how is the demodulation performance of Darlington detectors on higher frequencies in the shortwave range? This provided that HF-capable transistors like BF494, BF495, BF240, etc. are used.

26867. Re: Using a Darlington pair as an AM detector.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-25 20:15:05 UTC
From: dawmast@...
Topic: 26864 Message: 26867

When using a Darlington pair as an AM detector, the collector of the first left transistor should be connected to the supply rail, in stead of connecting it to the collector of the second right transistor. An improvement is also to put a resistor with a value between 10k to 100k between the emitter of the first transistor and ground. Purpose is to discharge the base emitter junction of the second BJT and to allow flowing sufficient current through the first BJT.

At http://electronics.stackexchange.com/questions/77520/resistors-within-a-darlington-transistor http://electronics.stackexchange.com/questions/77520/resistors-within-a-darlington-transistor it is explained why this resistor is needed:

Those resistors are to speed turn-off. The base-emitter junction has some capacitance, which is made apparently larger in an inverting amplifier configuration by the Miller effect. To turn the transistor off, this capacitance must be discharged.

When the base drive is removed, there is no path to discharge this capacitance of the right transistor, because the reversed-biased base-emitter of the left transistor prevents it. These resistors provide a path for this discharge current.

I think this also true for using darlington pairs as detector on higher shortwave frequencies. Think about the negative half of the RF signal cycle.

You can also let the first transistor of a Darlington pair function as an infinite impedance detector, put a capacitor of some nF between the emitter and ground of this transistor and shunt it by a resistor of 100k. Then the second transistor only functions as an AF preamplifier.

26868. Re: [regenrx] Using a Darlington pair as an AM detector.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-25 20:37:18 UTC
From: Tom Lee
Topic: 26864 Message: 26868

Hi Jim,

There is definitely a tradeoff between gain and bandwidth for a Darlington. However, it's not because the input capacitance grows (it in fact goes down -- you have two capacitances in series; it can't go any other way). It's because the collector current of the first transistor is the base current of the second, so the first transistor is starved for current. Transconductance is proportional to current for a bipolar, so gm will go way down, but the capacitance only does so for a while (then it bottoms out). So ft plummets. Plus, the low current means that it slews poorly, so there's a large-signal limitation that compounds the small-signal effect.

A more subtle problem is that the capacitance of the second transistor reflects as a negative resistance when viewed from the base of the first. That can lead to oscillation. This phenomenon explains why you see so many "base spoiling" resistors in stages where a follower is driving a capacitive load.

--Cheers,
Tom

--
Prof. Thomas H. Lee
Allen Bldg. Rm.205
420 Via Palou Mall
Stanford University
Stanford, CA 94305-4070
http://www-smirc.stanford.edu

On 7/25/2016 12:10 PM, 'Jim Scott' jim.scott@...
[regenrx] wrote:
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> *Sent:* Monday, July 25, 2016 10:56 AM
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> *Subject:* [regenrx] Using a Darlington pair as an AM detector.
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>
> Darlington pairs used as an AM detector, are very suitable for
> using it in TRF and regenerative receivers, because they have a
> very high input impedance. This allows to connect them onto the
> top, or hot end, of any tank circuit. Coil taps or link coils ar e
> not necessary anymore. Very useful when using a Q-Multiplier with
> two-terminal coils only, think about the Colpitts and
> emitter-coupled oscillator topologies.
>

> In a Darlington circuit the first transistor acts as an impedance
> converter, while the second transistor is the actual AM detector
> in which the collector has been shunted to ground for RF signal b!
> y a cap of 10 nF.
>
> But how is the demodulation performance of Darlington detectors on
> higher frequencies in the shortwave range? This provided that
> HF-capable transistors like BF494, BF495, BF240, etc. are used.
>
>

26869. Re: Using a Darlington pair as an AM detector.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-26 07:12:16 UTC
From: dawmast@...
Topic: 26864 Message: 26869

A Transistor operating in current starvation mode can be used as an infinite impedance detector in a TRF or a regenerative receiver. See these two regenerative receivers at http://oernst.f5lvg.free.fr/rx/14mhz/rx1v1_14mhz.htm
http://oernst.f5lvg.free.fr/rx/14mhz/rx1v1_14mhz.htm and
http://oernst.f5lvg.free.fr/rx/0v2/0v2.html http://oernst.f5lvg.free.fr/rx/0v2/0v2.html in which a separated detector stage is used which is biased in current starvation mode with an Ic of a few uA. Here general purpose transistors like the BC547 are used in the detector stage, in stead of using RF transistors. I think that when suitable RF transistors are used in a current starved infinite impedance detector, the detector would also be able to detect higher shortwave frequencies and even VHF frequencies. Another example of such an infinite impedance detector is at http://www.qsl.net/g3oou/solidstatecircuits8.html
http://www.qsl.net/g3oou/solidstatecircuits8.html

Schematics of current starved infinite impedance detectors:

http://oernst.f5lvg.free.fr/rx/14mhz/figure%201.gif
http://oernst.f5lvg.free.fr/rx/14mhz/figure%201.gif

http://oernst.f5lvg.free.fr/rx/14mhz/figure%201.gif

http://oernst.f5lvg.free.fr/rx/14mhz/figure%201.gif
http://oernst.f5lvg.free.fr/rx/14mhz/figure%201.gif

View on oernst.f5lvg.free.fr http://oernst.f5lvg.free.fr/rx/14mhz/figure%201.gif
Preview by Yahoo

http://oernst.f5lvg.free.fr/rx/0v2/svjmojn2.gif
http://oernst.f5lvg.free.fr/rx/0v2/svjmojn2.gif

http://oernst.f5lvg.free.fr/rx/0v2/svjmojn2.gif

http://oernst.f5lvg.free.fr/rx/0v2/svjmojn2.gif
http://oernst.f5lvg.free.fr/rx/0v2/svjmojn2.gif

View on oernst.f5lvg.free.fr http://oernst.f5lvg.free.fr/rx/0v2/svjmojn2.gif
Preview by Yahoo

http://www.qsl.net/g3oou/_wp_generated/wpb1e04994_06.png
http://www.qsl.net/g3oou/_wp_generated/wpb1e04994_06.png

How would a poorly slewing transistor due to the current starvation be noticeable when receiving shortwave stations at higher shortwave frequencies, or will the sensitivity be reduced?

@Tom:

"A more subtle problem is that the capacitance of the second transistor reflects as a negative resistance when viewed from the base of the first. That can lead to oscillation.

This phenomenon explains why you see so many "base spoiling" resistors in stages where a follower is driving a capacitive load."

This is the capacitive voltage divider which is part of a Copitts oscillator, but it is hidden as internal parasitic capacitances inside the Darlington transistors.

26870. TDA7052 amp chips tinkerers

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-27 02:39:14 UTC
From: William Wood
Topic: 26789 Message: 26870

A Belated Thanks Rob
For one reason or another I have not gotten around to tinkering yet :) Mowing weeding and cleaning windows :) Anyways, I'm sorry I did not post this last week, got my goodies from Rob and don't think I have anything I HAVE to do tomorrow so will look up the data sheets. I do know where my breadboard with PS resides, so I am running out of excuses.
I can look through some of the group's old emails, but has someone an idea of where I should start? In other words, what have you done, and would putzing with your circuit provide me with some education :)
I guess that would be answered yes… :)
IF I have anyone's attention yet, I'm thinking of a possible kit like Rob's. Not to be in competition Rob, just bought a bunch of those 3 lead TRF ICs, and would like to see some results working with them…
Would there be any interest in those three legged ICs??? Can't imagine how they get so many items into one of those little things, that look like a 2n2222…
Be glad to help sponsor a tinkerer's kit if anyone has a hankering to play with this IC. Let me know what I should include if I do do something like that.
Thanks again Rob.
73 fer now everyone
Bill KE9XQ

26871. Re: [regenrx] TDA7052 amp chips tinkerers TA7642

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-27 03:12:54 UTC
From: Rob
Topic: 26789 Message: 26871

DID YOU GET TA7642 ICs ??????
http://www.learnmorsecode.com/amp/TA7642app.jpg

I got a pile of them to play this same game!..... figure out something
to kit for the kids... scouts.

I landed on the 7.16 ceramic resonator project because it gave me real
world 40 meter CW
not just local broadcast radio stations.... which around here isn't too
kid friendly..... no music stations....
just preachers , fear mongering political garbage, and talking about
sports radio. Absolutely useless crap.

You build whatever piques your interest.
I sent the TDA7052 chips to see if anyone could build a room filling
loud audio amplifier
to play the 716 circuit. I'm just looking for an example of something
that works... after I couldn't
get the loud audio results here.

Today's experiments here are with TL431 audio amplifier circuits:

http://www.learnmorsecode.com/amp/tl431.html

http://www.learnmorsecode.com/716/etch/index.html

http://www.learnmorsecode.com/716/716.html

On 07/26/2016 10:39 PM, William Wood ke9xq@... [regenrx] wrote:
> A Belated Thanks Rob
> For one reason or another I have not gotten
> around to tinkering yet :) Mowing weeding and
> cleaning windows :) Anyways, I?m sorry I did not
> post this last week, got my goodies from Rob and
> don?t think I have anything I HAVE to do tomorrow
> so will look up the data sheets. I do know where my
> breadboard with PS resides, so I am running out of
> excuses.
> I can look through some of the group?s old emails,
> but has someone an idea of where I should start? In
> other words, what have you done, and would putzing
> with your circuit provide me with some education :)
> I guess that would be answered yes? :)
> IF I have anyone?s attention yet, I?m thinking of a
> possible kit like Rob?s. Not to be in competition Rob,
> just bought a bunch of those 3 lead TRF ICs, and
> would like to see some results working with them?

> Would there be any interest in those three legged
> ICs??? Can?t imagine how they get so many items
> into one of those little things, that look like a 2n2222?
> Be glad to help sponsor a tinkerer?s kit if anyone has
> a hankering to play with this IC. Let me know what
> I should include if I do do something like that.
> Thanks again Rob.
> 73 fer now everyone
> Bill KE9XQ
>
> ------------------------------------
>
> ------------------------------------
>
> "In the interest of Regenerating radio's lost art of Regeneration"
> ------------------------------------
>
> Yahoo Groups Links
>
>
>
>

26872. Re: Using a Darlington pair as an AM detector.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-27 19:37:53 UTC
From: dawmast@...
Topic: 26864 Message: 26872

Darlington feedback pairs are also used in monolithic amplifiers intended for microwave purposes, see https://www.minicircuits.com/pdfs/MAR-2SM+.pdf
https://www.minicircuits.com/pdfs/MAR-2SM+.pdf for example.

Here is a synchronous oscillator in which a Darlington pair is used to demodulate the 10.7 MHz IF signal. TUN stands for a universal transistor like the BC547. T1 forms a high-Z input buffer, while T2 is the actual synchronous oscillator. To improve the performance, I would put a resistor of 10k between the emitter of T1 and ground.

http://www.uploadarchief.net/files/download/fm-synchroontuner(2).gif
http://www.uploadarchief.net/files/download/fm-synchroontuner(2).gif

http://www.uploadarchief.net/files/download/fm-synchroontuner(2).gif

http://www.uploadarchief.net/files/download/fm-synchroo...
http://www.uploadarchief.net/files/download/fm-synchroontuner(2).gif

View on www.uploadarchief.net
http://www.uploadarchief.net/files/download/fm-synchroontuner(2).gif
Preview by Yahoo

26873. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-27 20:34:57 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 26873

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Leonard's Stuff/GR-81b1.bmp
Uploaded by : leonardmeek <lemeek@...>
Description : Current schematic

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Leonard%27s%20Stuff/GR-81b1.bmp

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

leonardmeek <lemeek@...>

26874. GR-81b1

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-27 20:58:36 UTC
From: Leonard Meek
Topic: 26874 Message: 26874

I just uploaded photos & schematic of my version of Rob's (Kyoritsu) version of the Heath GR-81. It works quite well right now but doesn't do well on SSB or CW. At present it uses a 6DJ8 detector and untuned RF amp with an MPF-102 booster. The RF gain is unsat and will be replaced with an ant attenuator in the input. At the risk of completely screwing it up, I'm going to replace the 6DJ8 with a 6U8A, with the pentode section as the detector and the triode as a GG amp. I'll see if I can get by without the booster amp. It tunes from about 500KHz to over 20MHz with 7 plugin coils. As with all my chassis mounter speaker sets, there's a certain ammount of accoustic feedback, but it's controlable. Watch this space for further developments.

Leonard

26875. 716 regen audio experiment with TL431 WORKS

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-31 01:16:05 UTC
From: Rob
Topic: 26875 Message: 26875

Playing with the TL431 ...built a minimalist audio amplifier:

http://www.learnmorsecode.com/amp/tl431.html

conclusions..... ?!??!
TL431 circuit definitely works as a headphone amplifier
but needed a pre-amp
so I used the $1 off the shelf LM386 kit as pre-amp stage.

http://www.learnmorsecode.com/716/716.html
http://www.learnmorsecode.com/716/etch/index.html

Going to play with multiple stages.

26876. Re: 716 regen audio experiment with TL431 WORKS

Yahoo group: regenrx (2016 — 2017)
Date: 2016-07-31 12:49:56 UTC
From: kf8zn@...
Topic: 26875 Message: 26876

The only reason it works is the alien on the circuit board.

26877. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-02 01:54:45 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 26877

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Leonard's Stuff/GR-81e.bmp
Uploaded by : leonardmeek <lemeek@...>
Description : Updated GR-81

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Leonard%27s%20Stuff/GR-81e.bmp

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

leonardmeek <lemeek@...>

26878. GR-81e

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-02 02:16:58 UTC
From: Leonard Meek
Topic: 26878 Message: 26878

I just uploaded my latest revision of my version of Rob's (Kyoritsu) version of the Heath GR-81. I made a few changes in the front end that seem to work pretty well. I changed the 6DJ8 to a 6U8A. There didn't seem to be much advantage to a variable cap on the tickler coil so I deleted it. I changed the 12AX7 to a 5751, which reduced the accoustic feedback. SSB is much clearer now, although a little drifty. One remaining problem is the panel. It's 1/8" plexiglass with a thin sheet of aluminum backing, and it flexes enough to affect tuning. I'll play with it for a whille before moving on to my next project.

Leonard

26879. 716 regen VU2PPP TL431 heard France

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-02 05:39:43 UTC
From: Rob
Topic: 26879 Message: 26879

This might be THE final circuit to share with newbies.

The 716 regen project
http://www.learnmorsecode.com/716/index.html

gelled into the repeatable circuit
http://www.learnmorsecode.com/716/etch/001drawing.jpg
that was etched
http://www.learnmorsecode.com/716/etch/050done.jpg
http://www.learnmorsecode.com/716/etch/index.html

and proved to work just like the wirewrap version
http://www.learnmorsecode.com/716/716.html

when plugged into an audio amplifier
so then experimenting with TL431 ICs made
some progress with minimalist audio circuits:
http://www.learnmorsecode.com/amp/tl431.html

the last experiment was with a VU2PPP circuit that added a 2N2222 to the
TL431
http://www.learnmorsecode.com/amp/tl431VU2PPP00.jpg

which gave pretty good desk top audio.
and
I heard F5IN in France:
http://www.learnmorsecode.com/amp/f5inqso.mp3

so I'm thinking this audio amp circuit should be knitted into the
716 etched circuit to build the complete receiver on one PCB.

All I gotta say is "WOW".

26880. Re: [regenrx] 716 regen VU2PPP TL431 heard France

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-02 08:03:50 UTC
From: Michael
Topic: 26879 Message: 26880

A little confused I am...

Rob, could you separately post the schematic of the final
optimised RF+AF design adopted?

Thanks!

Michael

On 02.08.16 06:39, Rob roomberg@... [regenrx] wrote:

> This might be THE final circuit to share with newbies.
>
> The 716 regen project
> http://www.learnmorsecode.com/716/index.html
>
> gelled into the repeatable circuit
> http://www.learnmorsecode.com/716/etch/001drawing.jpg
> that was etched
> http://www.learnmorsecode.com/716/etch/050done.jpg
> http://www.learnmorsecode.com/716/etch/index.html
>
> and proved to work just like the wirewrap version
> http://www.learnmorsecode.com/716/716.html
>
> when plugged into an audio amplifier
> so then experimenting with TL431 ICs made
> some progress with minimalist audio circuits:
> http://www.learnmorsecode.com/amp/tl431.html
>
> the last experiment was with a VU2PPP circuit that added a 2N2222 to the
> TL431
> http://www.learnmorsecode.com/amp/tl431VU2PPP00.jpg
>
> which gave pretty good desk top audio.
> and
> I heard F5IN in France:
> http://www.learnmorsecode.com/amp/f5inqso.mp3
>
> so I'm thinking this audio amp circuit should be knitted into the
> 716 etched circuit to build the complete receiver on one PCB.
>
> All I gotta say is "WOW".

26881. Re: [regenrx] 716 regen VU2PPP TL431 heard France RF +AF

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-03 01:32:40 UTC
From: Rob
Topic: 26879 Message: 26881

short answer:
716 receiver:
http://www.learnmorsecode.com/716/VK3YEmodKB3BYTv2.jpg

connected to TL431 audio amp
http://www.learnmorsecode.com/amp/tl431VU2PPP00.jpg

long answer:
Yes.... its a mess of stragles .... a picture here... an email there......
but
its definitely all laid out real neat so anyone can repeat these
experiments.

There were two halves of this experiment... first was a receiver circuit
and the one that
worked for me using WIREWRAP and then replicating it with printing a
circuit board was this one here:
http://www.learnmorsecode.com/716/VK3YEmodKB3BYTv2.jpg
at
http://www.learnmorsecode.com/716/716.html

Noting the two parallel 10 Megaohm resistors were replaced with one 4.7
Megaohm resistor
on the printed circuit board seen here:

http://www.learnmorsecode.com/716/etch/index.html

Note also that all of my 716 experiments fed their output into a store
bought 9 volt guitar amplifier
that was based on TL072 preamp and TDA7052 ICs.
sooooooooo.....
next came audio amplifier experiments.
I failed to produce acceptable audio using the TDA7052 ICs so that
distraction took me a month
to give up on before offering TDA7052 chips to anyone who wanted to try
to make room filling
audio come out of the 716 circuit.
http://www.learnmorsecode.com/amp/honeyrule.jpg

Then I played with LM386 ICs
http://www.learnmorsecode.com/716/lm386.html

And then I played with TL431 ICs
http://www.learnmorsecode.com/amp/tl431.html

Definitely concluding that the original 716 circuit was producing
enough audio output to drive the guitar amp but barely enough to

drive a TDA7052 or LM386 or TL431 without having at least one more
pre-amp circuits in front of those ICs.

And it wasn't just me.
One of my 716 "tinkerers" reported low audio results until adding
multiple amplification stages.

So my last experiment was with the VU2PPP audio circuit:
http://www.learnmorsecode.com/amp/tl431VU2PPP00.jpg

which is the bottom half of this web page:
http://www.learnmorsecode.com/amp/tl431.html

I am not an electrical engineer.
This is strictly amateur hobby radio electronics dabblings in
electronics witchcraft......
so if anyone wants to tell me to add or change something here because
components will burn then I'm all ears.

The mission here was to simply find a minimalist parts 40 meter
CW receiver circuit that could be repeated with newbies... kids.. scouts.
And so far......
this is looking like it works.
For me...hearing France seconds after applying power to the circuit
just says it all.
It was "desk top" loud enough in an 8 ohm speaker.
I would still like to have louder ....because I am a few feet away
from a noisy air conditioner.
But overall this was a successful endeavor.
I may examine changing a few resistors to get more volume.
If anyone has any advice there I would take it.

IF
nothing gets changed
THEN
I do expect to merge the existing 716 circuit with the existing VU2PPP
audio circuit for a one board build.

On 08/02/2016 04:03 AM, Michael michael.setaazul@...
[regenrx] wrote:
>
> A little confused I am...
>
> Rob, could you separately post the schematic of the final
> optimised RF+AF design adopted?
>
> Thanks!
>
> Michael
>

26882. Re: Using a Darlington pair as an AM detector.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-06 03:57:01 UTC
From: kc2siz@...
Topic: 26864 Message: 26882

FWIW: I built the "Junkbox Regen" described on Ray Ring's site and it works very well. It uses a couple of 2N222A transistors in Darlington arrangement.

26883. last news

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-05 20:53:29 UTC
From: rdl014
Topic: 26883 Message: 26883
Attachments: 1 described; binary payloads are missing from this source WARC

Greetings!

Here are some news since we've met last time, just read'em here
<http://tendency.thatsliv.com/lnszzaq>

Yours sincerely, rdl014

26884. Re: [regenrx] last news

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-08 01:16:06 UTC
From: Cecil Bayona
Topic: 26883 Message: 26884

THe link contains malware, stay away.

On 8/5/2016 3:53 PM, rdl014 rdl014@... [regenrx] wrote:
>
> Greetings!
>
> Here are some news since we've met last time, just read'em here
> http://tendency.thatsliv.com/lnszzaq
>
> Yours sincerely, rdl014
>
>
> --
> Posted by: rdl014 <rdl014@...>
> --
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Cecil - k5nwa
http://thepartsplace.k5nwa.com/

26885. Can I substitute ETHYL LACTATE as heatless toner transfer solution

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-08 01:44:57 UTC
From: Rob
Topic: 26885 Message: 26885

I just finished the copper layout process in GIMP for the TIP31 TIP32
mod for the SM7UCZ push/pull experiment:
2N3904-6 circuit:
http://www.learnmorsecode.com/amp/SM7UCZamp2.jpg
board to etch:
http://www.learnmorsecode.com/amp/SM7UCzamp1.jpg

revised for TIP31-2 :
http://www.learnmorsecode.com/amp/SM7UCZampTIP31.jpg
http://www.learnmorsecode.com/amp/SM7UCzamp1TIP31.jpg

All just a stack of comparison experiments:
http://www.learnmorsecode.com/amp/tl431.html

I stumbled across two methods of getting the printer toner to release
off of paper
and transfer onto copper clad board without using heat like an iron or a
laminator.

One method said to spray white lacquer paint onto the copper and let it
dry about one minute
and then simply press the laser printed circuit onto the painted copper
board.
Then peel away the paper and it leaves the toner stuck to the PCB.

THEN ... lightly rag wash the PCB with alcohol and the white lacquer
paint will rub off
leaving the toner image.
Stunning successful results on youtube:
https://www.youtube.com/watch?v=0dpCi9kgpuw

The other heatless transfer method was much more scientificly explained

https://www.youtube.com/watch?v=HBIxvwZ_0og

that alcohol has no affect on toner while acetone easily washes away
toner so
by mixing 8 parts alcohol to 3 parts acetone you get a solution that will
SOFTEN the toner enough to make it sticky but not dissolve or blur.

So this got me wondering just what is acetone?
How toxic is it to play with acetone?
And concluded that acetone is some pretty benign stuff compared to other
solvents here.

I have some brush cleaner labeled DANGER POISON EXTREMELY FLAMMABLE
that contains:

ACETONE
METHONOL
METHYLENE CHLORIDE
TOLUENE
XYLENE

warning of cancer and all sorts of nasties.

I have another solvent screaming how green and better for the environment it is
KLEAN STRIP GREEN
Natural Multi Purpose Solvent
which warns CAUTION:COMBUSTIBLE,EYE IRRITANT

instesting.... not a poison?
which contains ETHYL LACTATE

so this has me wondering if I can actually dilute the ETHYL LACTATE..... mix it
with alcohol to do the same thing as the ACETONE/ALCOHOL on youtube heatless transfer.

but I'm no chemist.

Can I mix this ETHYL LACTATE with alcohol? water? alcohol that comes mixed with water?
Just for giggles..... lets say I do come up with a mixture of ethyl lactate mixed with alcohol thats DOES actually do the
toner transfer the same as 8 parts alcohol with 3 parts acetone and I get nice toner circuit stuck to copper board.

What happens next when I dunk the copper board into muriatic acid and hydrogen peroxide?
Does the ETHYL LACTATE in the toner go nuts and burn off the board?

26886. Re: [regenrx] Re: Using a Darlington pair as an AM detector.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-08 01:51:04 UTC
From: Rob
Topic: 26864 Message: 26886

Have you got URL link for the Ray Ring JUNKBOX regen ?

On 08/05/2016 11:57 PM, kc2siz@... [regenrx] wrote:
>
> FWIW: I built the "Junkbox Regen" described on Ray Ring's site and it
> works very well. It uses a couple of 2N222A transistors in Darlington
> arrangement.
>
>

26887. seeking schematica for TA7642 multiband receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-08 06:46:07 UTC
From: MARINELLUCCIA1@...
Topic: 26887 Message: 26887

Hi,

someone have ashematic for multiband receiver with ta7642 ic?
I've intersted to lw/mw/and low band SW .
If you have also a front end schematic suitable for this bands are welcome..

Many thanks
Roberto iw2evk

26888. Re: [regenrx] seeking schematica for TA7642 multiband receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-08 07:10:48 UTC
From: Rob
Topic: 26887 Message: 26888

http://www.learnmorsecode.com/amp/TA7642app.jpg

On 08/08/2016 02:46 AM, MARINELLUCCIA1@... [regenrx] wrote:
>
> Hi,
>
> someone have ashematic for multiband receiver with ta7642 ic?
> I've intersted to lw/mw/and low band SW .
> If you have also a front end schematic suitable for this bands are
> welcome..
>
> Many thanks
> Roberto iw2evk
>
>

26889. Re: Using a Darlington pair as an AM detector.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-08 07:50:11 UTC
From: dawmast@...
Topic: 26864 Message: 26889

The URL links of the Junkbox Regen are mentioned in the starting post above.

26890. Re: [regenrx] seeking schematica for TA7642 multiband receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-08 14:55:45 UTC
From: William Wood
Topic: 26887 Message: 26890

I just sent off for 100 of those little ICs
When I get them I'll be happy to share
I hinted at this in my thanks to Rob for
the goodies he sent our way and thought
this chip would be also fun to play with.

I saw an add for one IC for $7 something,
or I could buy 100 for $4.45 and $1.50 for
shipping and handling :) Hard decision to
make… So, don't have too much invested
in the project.

Of course coming from China it will take a
couple of weeks to get here :)

73 Guys and thanks for all the food for thought
Bill

On Aug 8, 2016, at 2:10 AM, Rob roomberg@... [regenrx] <regenrx@yahoogroups.com> wrote
:

> http://www.learnmorsecode.com/amp/TA7642app.jpg
>
>
>
> On 08/08/2016 02:46 AM, MARINELLUCCIA1@... [regenrx] wrote:
>>
>> Hi,
>>
>> someone have ashematic for multiband receiver with ta7642 ic?
>> I've intersted to lw/mw/and low band SW .
>> If you have also a front end schematic suitable for this bands are welcome..
>>
>> Many thanks
>> Roberto iw2evk

26891. Re: [regenrx] seeking schematica for TA7642 multiband receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-08 16:04:22 UTC
From: Rob
Topic: 26887 Message: 26891

I am sitting on a pile of these already.
Give me an address and I will stuff an envelope..... you will see them
before Friday.
anyone want to tinker with TA7642?

I would love to see what anyone makes with these.
I have not experimented wit them yet.
I'm knee deep in 7.16 ceramic resonator audio circuit experiments now.

On 08/08/2016 10:55 AM, William Wood ke9xq@... [regenrx] wrote:
>
> I just sent off for 100 of those little ICs
>
> When I get them I?ll be happy to share
> I hinted at this in my thanks to Rob for
> the goodies he sent our way and thought
> this chip would be also fun to play with.
>
> I saw an add for one IC for $7 something,
> or I could buy 100 for $4.45 and $1.50 for
> shipping and handling :) Hard decision to
> make? So, don?t have too much invested
> in the project.
>
> Of course coming from China it will take a
> couple of weeks to get here :)
>
> 73 Guys and thanks for all the food for thought
> Bill
>
> On Aug 8, 2016, at 2:10 AM, Rob roomberg@...
> <mailto:roomberg@...> [regenrx] <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>> wrote
> :
>
>> http://www.learnmorsecode.com/amp/TA7642app.jpg
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>>
>> On 08/08/2016 02:46 AM,MARINELLUCCIA1@...[regenrx] wrote:
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>>> Hi,
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>>> someone have ashematic for multiband receiver with ta7642 ic?
>>> I've intersted to lw/mw/and low band SW .
>>> If you have also a front end schematic suitable for this bands are

>>> welcome..
>>>
>>> Many thanks
>>> Roberto iw2evk
>>>
>

26892. Re: [regenrx] seeking schematica for TA7642 multiband receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-08 16:48:18 UTC
From: William Wood
Topic: 26887 Message: 26892
Attachments: 1 described; binary payloads are missing from this source WARC

I too will look forward to seeing anyone’s
results with playing with the TA7642 :)
Would ask for some myself, but I have
more time then money (I hope) :)
I did see some youtube results of this
IC and it does look promising.
73 fer now
Bill
>>>Clip

26893. Re: [regenrx] seeking schematica for TA7642 multiband receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-08 16:54:06 UTC
From: William Wood
Topic: 26887 Message: 26893

https://www.youtube.com/watch?v=hI3bOEPt7Qo

On Aug 8, 2016, at 11:04 AM, Rob roomberg@... [regenrx] <regenrx@yahoogroups.com> wrote:

> I am sitting on a pile of these already.
> Give me an address and I will stuff an envelope..... you will see them before Friday.
> anyone want to tinker with TA7642?
>
> I would love to see what anyone makes with these.
> I have not experimented wit them yet.
> I'm knee deep in 7.16 ceramic resonator audio circuit experiments now.
>
>
>
>
>
>
> On 08/08/2016 10:55 AM, William Wood ke9xq@... [regenrx] wrote:
>>
>> I just sent off for 100 of those little ICs
>>
>> When I get them I'll be happy to share
>> I hinted at this in my thanks to Rob for
>> the goodies he sent our way and thought
>> this chip would be also fun to play with.
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>> I saw an add for one IC for $7 something,
>> or I could buy 100 for $4.45 and $1.50 for
>> shipping and handling :) Hard decision to
>> make… So, don't have too much invested
>> in the project.
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>> Of course coming from China it will take a
>> couple of weeks to get here :)
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>> 73 Guys and thanks for all the food for thought
>> Bill
>>
>> On Aug 8, 2016, at 2:10 AM, Rob roomberg@... [regenrx] <regenrx@yahoogroups.com> wrote
>> :
>>
>>> http://www.learnmorsecode.com/amp/TA7642app.jpg
>>>
>>>
>>>

>>> On 08/08/2016 02:46 AM, MARINELLUCCIA1@... [regenrx] wrote:
>>>>
>>>> Hi,
>>>>
>>>> someone have ashematic for multiband receiver with ta7642 ic?
>>>> I've intersted to lw/mw/and low band SW .
>>>> If you have also a front end schematic suitable for this bands are welcome..
>>>>
>>>> Many thanks
>>>> Roberto iw2evk
>>>>
>
>

26894. Re: [regenrx] seeking schematica for TA7642 multiband receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-08 17:00:29 UTC
From: Cecil Bayona
Topic: 26887 Message: 26894

I bought some from China, unfortunately they are worthless, the pins
were all corroded like they had been stored in very damp conditions, so
most likely they are worthless in my case.

On 8/8/2016 9:55 AM, William Wood ke9xq@... [regenrx] wrote:
>
> I just sent off for 100 of those little ICs
>
> When I get them I'll be happy to share
> I hinted at this in my thanks to Rob for
> the goodies he sent our way and thought
> this chip would be also fun to play with.
>
> I saw an add for one IC for $7 something,
> or I could buy 100 for $4.45 and $1.50 for
> shipping and handling :) Hard decision to
> make… So, don't have too much invested
> in the project.
>
> Of course coming from China it will take a
> couple of weeks to get here :)
>
> 73 Guys and thanks for all the food for thought
> Bill
>
> On Aug 8, 2016, at 2:10 AM, Rob roomberg@...
> <mailto:roomberg@...> [regenrx] <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>> wrote
> :
>
>> http://www.learnmorsecode.com/amp/TA7642app.jpg
>>
>>
>> On 08/08/2016 02:46 AM,MARINELLUCCIA1@...[regenrx] wrote:
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>>> Hi,
>>>
>>> someone have ashematic for multiband receiver with ta7642 ic?
>>> I've intersted to lw/mw/and low band SW .
>>> If you have also a front end schematic suitable for this bands are
>>> welcome..
>>>
>>> Many thanks
>>> Roberto iw2evk
>>>

>
> ---
> Posted by: William Wood <ke9xq@charter.net>
> ---
> \
> <https://groups.yahoo.com/neo/groups/regenrx/conversations/messages/26890;_ylc=X3oDMTJyOGozdjA4BF9TAzk3MzU5NzE0BGdycElkAzEzOTk2OTA3BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAMyNjg5MARzZWMDZnRyBHNsawNycGx5BHN0aW1lAzE0NzA2NjgxNDY-?act=reply&messageNum=26890>
>
>
> ,_._,___

--
Cecil - k5nwa
http://thepartsplace.k5nwa.com/

26895. Re: [regenrx] seeking schematica for TA7642 multiband receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-08 17:12:36 UTC
From: William Wood
Topic: 26887 Message: 26895

Hearing what Cecil said
Rob, can I get a couple from you then???
When I do get mine I'll compare them.
Be happy to trade, buy or whatever
hate to see you footing the bill all the time :)
let me know if I can find or trade something…
Thanks
Bill

William Wood
W2788 Birch Lane
La Crosse, WI 54601

On Aug 8, 2016, at 12:00 PM, Cecil Bayona cecil.bayona@... [regenrx] <regenrx@yahoogroups.com> wrote:

>
> I bought some from China, unfortunately they are worthless, the pins were all corroded like they had been stored in very damp conditions, so most likely they are worthless in my case.
>
> On 8/8/2016 9:55 AM, William Wood ke9xq@... [regenrx] wrote:
>>
>> I just sent off for 100 of those little ICs
>>
>> When I get them I'll be happy to share
>> I hinted at this in my thanks to Rob for
>> the goodies he sent our way and thought
>> this chip would be also fun to play with.
>>
>> I saw an add for one IC for $7 something,
>> or I could buy 100 for $4.45 and $1.50 for
>> shipping and handling :) Hard decision to
>> make… So, don't have too much invested
>> in the project.
>>
>> Of course coming from China it will take a
>> couple of weeks to get here :)
>>
>> 73 Guys and thanks for all the food for thought
>> Bill
>>
>> On Aug 8, 2016, at 2:10 AM, Rob roomberg@... [regenrx] <regenrx@yahoogroups.com> wrote
>> :
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>>> http://www.learnmorsecode.com/amp/TA7642app.jpg

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>>> On 08/08/2016 02:46 AM, MARINELLUCCIA1@... [regenrx] wrote:
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>>>> Hi,
>>>>
>>>> someone have ashematic for multiband receiver with ta7642 ic?
>>>> I've intersted to lw/mw/and low band SW .
>>>> If you have also a front end schematic suitable for this bands are welcome..
>>>>
>>>> Many thanks
>>>> Roberto iw2evk
>>>>
>
>
>
> --
> Cecil - k5nwa
> http://thepartsplace.k5nwa.com/
>
>

26896. Re: [regenrx] seeking schematica for TA7642 multiband receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-08 17:16:23 UTC
From: Cecil Bayona
Topic: 26887 Message: 26896

I tested one of mine, and it started catching fire when power was
applied, the typical power consumption is .2 ma, but not in my case so
they went to the trash.

On 8/8/2016 12:12 PM, William Wood ke9xq@... [regenrx] wrote:
>
> Hearing what Cecil said
>
> Rob, can I get a couple from you then???
> When I do get mine I'll compare them.
> Be happy to trade, buy or whatever
> hate to see you footing the bill all the time :)
> let me know if I can find or trade something…
> Thanks
> Bill
>
> William Wood
> W2788 Birch Lane
> La Crosse, WI 54601
>
>
>
> On Aug 8, 2016, at 12:00 PM, Cecil Bayona cecil.bayona@...
> <mailto:cecil.bayona@...> [regenrx] <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>> wrote:
>
>>
>> I bought some from China, unfortunately they are worthless, the pins
>> were all corroded like they had been stored in very damp conditions,
>> so most likely they are worthless in my case.
>>
>> On 8/8/2016 9:55 AM, William Woodke9xq@...[regenrx] wrote:
>>>
>>> I just sent off for 100 of those little ICs
>>>
>>> When I get them I'll be happy to share
>>> I hinted at this in my thanks to Rob for
>>> the goodies he sent our way and thought
>>> this chip would be also fun to play with.
>>>
>>> I saw an add for one IC for $7 something,
>>> or I could buy 100 for $4.45 and $1.50 for
>>> shipping and handling :) Hard decision to
>>> make… So, don't have too much invested
>>> in the project.

>>>
>>> Of course coming from China it will take a
>>> couple of weeks to get here :)
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>>> 73 Guys and thanks for all the food for thought
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>>> On Aug 8, 2016, at 2:10 AM, Robroomberg@...
>>> <mailto:roomberg@...>[regenrx] <regenrx@yahoogroups.com
>>> <mailto:regenrx@yahoogroups.com>> wrote
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>>>> http://www.learnmorsecode.com/amp/TA7642app.jpg
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>>>> On 08/08/2016 02:46 AM,MARINELLUCCIA1@TISCALI.IT[regenrx] wrote:
>>>>>
>>>>> Hi,
>>>>>
>>>>> someone have ashematic for multiband receiver with ta7642 ic?
>>>>> I've intersted to lw/mw/and low band SW .
>>>>> If you have also a front end schematic suitable for this bands are
>>>>> welcome..
>>>>>
>>>>> Many thanks
>>>>> Roberto iw2evk
>>>>>
>>
>>
>>
>> --
>> Cecil - k5nwa
>> http://thepartsplace.k5nwa.com/
>>
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> --
> Posted by: William Wood <ke9xq@...>
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Cecil - k5nwa
http://thepartsplace.k5nwa.com/

26897. RE: [regenrx] seeking schematica for TA7642 multiband receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-08 17:40:10 UTC
From: Larry
Topic: 26887 Message: 26897

That does look fascinating, Rob.

Larry Beaty

3696 Smithonia Road

Comer, Georgia 30629

Many thanks!

Larry

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Monday, August 08, 2016 12:54 PM
To: Rob roomberg@... [regenrx]
Subject: Re: [regenrx] seeking schematica for TA7642 multiband receiver

https://www.youtube.com/watch?v=hI3bOEPt7Qo

On Aug 8, 2016, at 11:04 AM, Rob roomberg@... [regenrx]
<regenrx@yahoogroups.com> wrote:

I am sitting on a pile of these already.
Give me an address and I will stuff an envelope..... you will see them
before Friday.
anyone want to tinker with TA7642?

I would love to see what anyone makes with these.
I have not experimented wit them yet.
I'm knee deep in 7.16 ceramic resonator audio circuit experiments now.

On 08/08/2016 10:55 AM, William Wood ke9xq@... [regenrx] wrote:

I just sent off for 100 of those little ICs

When I get them I'll be happy to share

I hinted at this in my thanks to Rob for

the goodies he sent our way and thought

this chip would be also fun to play with.

I saw an add for one IC for $7 something,

or I could buy 100 for $4.45 and $1.50 for

shipping and handling :) Hard decision to

make. So, don't have too much invested

in the project.

Of course coming from China it will take a

couple of weeks to get here :)

73 Guys and thanks for all the food for thought

Bill

On Aug 8, 2016, at 2:10 AM, Rob roomberg@... [regenrx]
<regenrx@yahoogroups.com> wrote

:

<http://www.learnmorsecode.com/amp/TA7642app.jpg>
http://www.learnmorsecode.com/amp/TA7642app.jpg

On 08/08/2016 02:46 AM, MARINELLUCCIA1@... [regenrx] wrote:

Hi,

someone have ashematic for multiband receiver with ta7642 ic?
I've intersted to lw/mw/and low band SW .
If you have also a front end schematic suitable for this bands are welcome..

Many thanks
Roberto iw2evk

26898. seeking schematica for TA7642 multiband receiver TINKERERS

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-09 00:50:28 UTC
From: Rob
Topic: 26887 Message: 26898

OK guys.....so far I have two tinkerers and one fire hazard.
Hey Cecil.... can I throw a couple your way and you see if mine are as
bad as yours were?

My interest here is learning what works.
So if anybody does build anything and can show and tell what works...
and just the same..what to avoid.....
I have no problem making this donation to the educational cause.

I've learned more in the last year from group efforts than I did in my
first 50 years of tinkering on my own.

I'm going to try to figure out this guy's schematic.
If anyone already has it then please share.
https://www.youtube.com/watch?v=hI3bOEPt7Qo

mailing to:

William Wood
W2788 Birch Lane
La Crosse, WI 54601

Larry Beaty
3696 Smithonia Road
Comer, Georgia 30629

> On Aug 8, 2016, at 12:00 PM, Cecil Bayona cecil.bayona@...
> <mailto:cecil.bayona@...> [regenrx] <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>> wrote:
>
>>
>> I bought some from China, unfortunately they are worthless, the pins
>> were all corroded like they had been stored in very damp conditions,
>> so most likely they are worthless in my case.
>>
>> On 8/8/2016 9:55 AM, William Woodke9xq@...[regenrx] wrote:
>>>
>>> I just sent off for 100 of those little ICs
>>>
>>> When I get them I?ll be happy to share
>>> I hinted at this in my thanks to Rob for
>>> the goodies he sent our way and thought
>>> this chip would be also fun to play with.
>>>
>>> I saw an add for one IC for $7 something,
>>> or I could buy 100 for $4.45 and $1.50 for
>>> shipping and handling :) Hard decision to

>>> make? So, don?t have too much invested
>>> in the project.
>>>
>>> Of course coming from China it will take a
>>> couple of weeks to get here :)
>>>
>>> 73 Guys and thanks for all the food for thought
>>> Bill
>>>
>>> On Aug 8, 2016, at 2:10 AM, Robroomberg@...
>>> <mailto:roomberg@...>[regenrx] <regenrx@yahoogroups.com
>>> <mailto:regenrx@yahoogroups.com>> wrote
>>> :
>>>
>>>> http://www.learnmorsecode.com/amp/TA7642app.jpg
>>>>
>>>>
>>>> On 08/08/2016 02:46 AM,MARINELLUCCIA1@...[regenrx] wrote:
>>>>>
>>>>> Hi,
>>>>>
>>>>> someone have ashematic for multiband receiver with ta7642 ic?
>>>>> I've intersted to lw/mw/and low band SW .
>>>>> If you have also a front end schematic suitable for this bands are
>>>>> welcome..
>>>>>
>>>>> Many thanks
>>>>> Roberto iw2evk
>>>>>

26899. Re: [regenrx] seeking schematica for TA7642 multiband receiver TINKERERS

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-09 01:20:51 UTC
From: Robert Matthias
Topic: 26887 Message: 26899
Attachments: 1 described; binary payloads are missing from this source WARC

Some time ago I built the entire TA7642 chip out of discrete components and it worked quite well. See attached photo.

Not sure why, but it needed a 9 volt supply rail instead of the usual 1.2 to 1.5 volts to function properly.

Bob VK2RL

On 9/08/2016 10:50 AM, Rob roomberg@...<mailto:roomberg@ptd.net> [regenrx] wrote:

OK guys.....so far I have two tinkerers and one fire hazard.
Hey Cecil.... can I throw a couple your way and you see if mine are as bad as yours were?

My interest here is learning what works.
So if anybody does build anything and can show and tell what works... and just the same..what to avoid.....
I have no problem making this donation to the educational cause.

I've learned more in the last year from group efforts than I did in my first 50 years of tinkering on my own.

I'm going to try to figure out this guy's schematic.
If anyone already has it then please share.
https://www.youtube.com/watch?v=hI3bOEPt7Qo

mailing to:

William Wood
W2788 Birch Lane
La Crosse, WI 54601

Larry Beaty
3696 Smithonia Road
Comer, Georgia 30629

26900. Re: [regenrx] seeking schematica for TA7642 multiband receiver TINKERERS [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-09 01:45:49 UTC
From: Rob
Topic: 26887 Message: 26900

way cool.

and
added Jim Pruitt to tinkerers list.

On 08/08/2016 09:20 PM, Robert Matthias robmat99@... [regenrx]
wrote:
>
> Some time ago I built the entire TA7642 chip out of discrete
> components and it worked quite well. See attached photo.
>
> Not sure why, but it needed a 9 volt supply rail instead of the usual
> 1.2 to 1.5 volts to function properly.
>
> Bob VK2RL
>
> On 9/08/2016 10:50 AM, Rob roomberg@... [regenrx] wrote:
>
>> OK guys.....so far I have two tinkerers and one fire hazard.
>> Hey Cecil.... can I throw a couple your way and you see if mine are
>> as bad as yours were?
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>> My interest here is learning what works.
>> So if anybody does build anything and can show and tell what works...
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>> I've learned more in the last year from group efforts than I did in
>> my first 50 years of tinkering on my own.
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>> I'm going to try to figure out this guy's schematic.
>> If anyone already has it then please share.
>> https://www.youtube.com/watch?v=hI3bOEPt7Qo
>>
>>
>>
>> mailing to:
>>
>> William Wood
>> W2788 Birch Lane
>> La Crosse, WI 54601
>>
>> Larry Beaty
>> 3696 Smithonia Road

>> Comer, Georgia 30629
>>
>>
>

26901. seeking schematica for TA7642 multiband receiver NOT YOUTUBE

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-09 02:11:25 UTC
From: Rob
Topic: 26887 Message: 26901

Here is a the source for building it without YOUTUBE

http://x01a4.net/dirc7/elec/am-fm-radio.htm

On 08/08/2016 09:45 PM, Rob roomberg@... [regenrx] wrote:
>
> way cool.
>
> and
> added Jim Pruitt to tinkerers list.
>
>
>
> On 08/08/2016 09:20 PM, Robert Matthias robmat99@... [regenrx]
> wrote:
>>
>> Some time ago I built the entire TA7642 chip out of discrete
>> components and it worked quite well. See attached photo.
>>
>> Not sure why, but it needed a 9 volt supply rail instead of the usual
>> 1.2 to 1.5 volts to function properly.
>>
>> Bob VK2RL
>>
>> On 9/08/2016 10:50 AM, Rob roomberg@... [regenrx] wrote:
>>
>>> OK guys.....so far I have two tinkerers and one fire hazard.
>>> Hey Cecil.... can I throw a couple your way and you see if mine are
>>> as bad as yours were?
>>>
>>> My interest here is learning what works.
>>> So if anybody does build anything and can show and tell what
>>> works... and just the same..what to avoid.....
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>>> I've learned more in the last year from group efforts than I did in
>>> my first 50 years of tinkering on my own.
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>>> I'm going to try to figure out this guy's schematic.
>>> If anyone already has it then please share.
>>> https://www.youtube.com/watch?v=hI3bOEPt7Qo
>>>
>>>
>>>
>>> mailing to:

>>>
>>> William Wood
>>> W2788 Birch Lane
>>> La Crosse, WI 54601
>>>
>>> Larry Beaty
>>> 3696 Smithonia Road
>>> Comer, Georgia 30629
>>>
>>>
>
>

26902. Re: [regenrx] seeking schematica for TA7642 multiband receiver TINKERERS [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-09 07:06:07 UTC
From: Udo Peters
Topic: 26887 Message: 26902

Hi Robert,
I don't know how you connected the transistors under the board but, is
it possible that you swapped collectors and emitters of the transistors
inadvertently?
73 de Udo, dk3bi

Am 09.08.2016 um 03:20 schrieb Robert Matthias robmat99@...
[regenrx]:
>
> Some time ago I built the entire TA7642 chip out of discrete
> components and it worked quite well. See attached photo.
>
> Not sure why, but it needed a 9 volt supply rail instead of the usual
> 1.2 to 1.5 volts to function properly.
>
> Bob VK2RL
>
> On 9/08/2016 10:50 AM, Rob roomberg@... [regenrx] wrote:
>
>> OK guys.....so far I have two tinkerers and one fire hazard.
>> Hey Cecil.... can I throw a couple your way and you see if mine are
>> as bad as yours were?
>>
>> My interest here is learning what works.
>> So if anybody does build anything and can show and tell what works...
>> and just the same..what to avoid.....
>> I have no problem making this donation to the educational cause.
>>
>> I've learned more in the last year from group efforts than I did in
>> my first 50 years of tinkering on my own.
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>> I'm going to try to figure out this guy's schematic.
>> If anyone already has it then please share.
>> https://www.youtube.com/watch?v=hI3bOEPt7Qo
>>
>>
>>
>> mailing to:
>>
>> William Wood
>> W2788 Birch Lane
>> La Crosse, WI 54601
>>
>> Larry Beaty

>> 3696 Smithonia Road
>> Comer, Georgia 30629
>>
>>
>

26903. Re: [regenrx] seeking schematica for TA7642 multiband receiver TINKERERS

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-09 09:50:00 UTC
From: Robert Matthias
Topic: 26887 Message: 26903
Attachments: 1 described; binary payloads are missing from this source WARC

That's a very interesting observation, Udo. But I believe they are connected the correct way round. I had a bag of 2N2222's which I used for the project, and the pinouts for these transistors differ from the more common BC547 variety.

That's the reason that they look like they have been inserted on the board incorrectly. Please refer to the attachment for the pinout details.

73, Bob

On 9/08/2016 5:06 PM, Udo Peters dk3bi@...<mailto:dk3bi@yahoo.de> [regenrx] wrote:

Hi Robert,
I don't know how you connected the transistors under the board but, is it possible that you swapped collectors and emitters of the transistors inadvertently?
73 de Udo, dk3bi

Am 09.08.2016 um 03:20 schrieb Robert Matthias robmat99@...<mailto:robmat99@...> [regenrx]:

Some time ago I built the entire TA7642 chip out of discrete components and it worked quite well. See attached photo.

Not sure why, but it needed a 9 volt supply rail instead of the usual 1.2 to 1.5 volts to function properly.

Bob VK2RL

On 9/08/2016 10:50 AM, Rob roomberg@...<mailto:roomberg@...> [regenrx] wrote:

OK guys.....so far I have two tinkerers and one fire hazard.
Hey Cecil.... can I throw a couple your way and you see if mine are as bad as yours were?

My interest here is learning what works.
So if anybody does build anything and can show and tell what works... and just the same..what to avoid.....
I have no problem making this donation to the educational cause.

I've learned more in the last year from group efforts than I did in my first 50 years of tinkering on my own.

I'm going to try to figure out this guy's schematic.
If anyone already has it then please share.
https://www.youtube.com/watch?v=hI3bOEPt7Qo

mailing to:

William Wood
W2788 Birch Lane
La Crosse, WI 54601

Larry Beaty
3696 Smithonia Road
Comer, Georgia 30629

26904. The ECH81 plus ECL82 Regenerodyne

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-09 16:52:53 UTC
From: Prof. Arnaldo Coro Antich
Topic: 26904 Message: 26904

The ECH81 ¨frequency converter stage¨ will benefit from a very simple RF signal attenuator in parallel with the link coupling. A 1000 ohms good quality carbon track potentiometer will work fine in that position. You can even use a wirewound 1000 ohms potentiometer because the action of its inductance will be almost nothing at the operating frequency.

The ECH81 may be used as an UP CONVERTER, if you want to build an AM Broadcast Band Receiver using the Regenerodyne circuit...10.000 megaHertz crystal will push up the 530 to 1700 kHz AM broadcast band to 10530 to 11700 kHz still an acceptable range for a well built regenerative detector But it would be a better choice to use a 3.0 megaHertz crystal and tune the regenerative detector from 3530 kHz to 4.7 mHz , although this choice will require very good shielding of the regenerative detector...in order to avoid feedthrough of signals of stations operating within the 3.53 and 4.7 mHz range, especially during local evening hours ...

When asked by a local radio amateur what if any advantage the AM broadcast band up conversion set up had, I explained that the dial of the regenerative detector can be easily calibrated to show 530 to 1700 kiloHertz... Tuning of the AM stations can be as sharp as one sideband by taking the regenerative detector very close to the point of oscillation, making it very selective.

No rare or unobtanium parts are involved !!!

73 and DX

Arnie Coro

CO2KK

26905. Re: [regenrx] seeking schematica for TA7642 multiband receiver TINKERERS [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-10 06:49:33 UTC
From: Udo Peters
Topic: 26887 Message: 26905

Hi Bob,
very interesting. I did a little search and found at wikipedia that
there are two different kinds of 2N2222 around. Some of them are marked
P2N2222, and those have the same pinout as the BC547.

73 de Udo, dk3bi

Am 09.08.2016 um 11:50 schrieb Robert Matthias robmat99@...
[regenrx]:
>
> That's a very interesting observation, Udo. But I believe they are
> connected the correct way round. I had a bag of 2N2222's which I used
> for the project, and the pinouts for these transistors differ from the
> more common BC547 variety.
>
> That's the reason that they look like they have been inserted on the
> board incorrectly. Please refer to the attachment for the pinout details.
>
> 73, Bob
>
> On 9/08/2016 5:06 PM, Udo Peters dk3bi@... [regenrx] wrote:
>
>> Hi Robert,
>> I don't know how you connected the transistors under the board but,
>> is it possible that you swapped collectors and emitters of the
>> transistors inadvertently?
>> 73 de Udo, dk3bi
>>
>>
>>
>> Am 09.08.2016 um 03:20 schrieb Robert Matthias robmat99@...
>> [regenrx]:
>>>
>>> Some time ago I built the entire TA7642 chip out of discrete
>>> components and it worked quite well. See attached photo.
>>>
>>> Not sure why, but it needed a 9 volt supply rail instead of the
>>> usual 1.2 to 1.5 volts to function properly.
>>>
>>> Bob VK2RL
>>>
>>> On 9/08/2016 10:50 AM, Rob roomberg@... [regenrx] wrote:
>>>
>>>> OK guys.....so far I have two tinkerers and one fire hazard.

>>>> Hey Cecil.... can I throw a couple your way and you see if mine are
>>>> as bad as yours were?
>>>>
>>>> My interest here is learning what works.
>>>> So if anybody does build anything and can show and tell what
>>>> works... and just the same..what to avoid.....
>>>> I have no problem making this donation to the educational cause.
>>>>
>>>> I've learned more in the last year from group efforts than I did in
>>>> my first 50 years of tinkering on my own.
>>>>
>>>> I'm going to try to figure out this guy's schematic.
>>>> If anyone already has it then please share.
>>>> https://www.youtube.com/watch?v=hI3bOEPt7Qo
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>>>> mailing to:
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>>>> William Wood
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>>>> Larry Beaty
>>>> 3696 Smithonia Road
>>>> Comer, Georgia 30629
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26906. The ECH81 plus ECL82 Regenerodyne

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-10 19:10:47 UTC
From: Bry Carling
Topic: 26904 Message: 26906

Have you personally built this circuit and used it Arnie?
Bry Carling, Af4K

> To: gregcris@...; tetrode@...; regenrx@yahoogroups.com
> From: coro@...
> Subject: [Glowbugs] The ECH81 plus ECL82 Regenerodyne
> Date: Tue, 9 Aug 2016 12:52:53 -0400
>
> The ECH81 ¨frequency converter stage¨ will benefit from a very simple RF
> signal attenuator in parallel with the link coupling. A 1000 ohms good
> quality carbon track potentiometer will work fine in that position. You
> can even use a wirewound 1000 ohms potentiometer because the action of
> its inductance will be almost nothing at the operating frequency.
>
> The ECH81 may be used as an UP CONVERTER, if you want to build an AM
> Broadcast Band Receiver using the Regenerodyne circuit...10.000
> megaHertz crystal will push up the 530 to 1700 kHz AM broadcast band to
> 10530 to 11700 kHz still an acceptable range for a well built
> regenerative detector But it would be a better choice to use a 3.0
> megaHertz crystal and tune the regenerative detector from 3530 kHz to
> 4.7 mHz , although this choice will require very good shielding of the
> regenerative detector...in order to avoid feedthrough of signals of
> stations operating within the 3.53 and 4.7 mHz range, especially during
> local evening hours ...
>
> When asked by a local radio amateur what if any advantage the AM
> broadcast band up conversion set up had, I explained that the dial of
> the regenerative detector can be easily calibrated to show 530 to 1700
> kiloHertz... Tuning of the AM stations can be as sharp as one sideband
> by taking the regenerative detector very close to the point of
> oscillation, making it very selective.
>
> No rare or unobtanium parts are involved !!!
>
> 73 and DX
>
> Arnie Coro
>
> CO2KK
>
> --
> --
> ZCZC
> This is a transmission from the Glowbugs list
> To unsubscribe from this group, send email to

> tetrode+unsubscribe@...
> For more options, visit this group at
> http://groups.google.com/group/tetrode?hl=en
> NNNN
>
> ---
> You received this message because you are subscribed to the Google Groups "Glowbugs" group.
> To unsubscribe from this group and stop receiving emails from it, send an email to tetrode+unsubscribe@googlegroups.com.
> For more options, visit https://groups.google.com/d/optout.

26907. Re: The ECH81 plus ECL82 Regenerodyne

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-11 00:19:38 UTC
From: b_weeber@...
Topic: 26904 Message: 26907

Hello Arnie

Some thoughts about the idea:

- An upconverted range has a smaller frequency ratio, therefore the regeneration has to be adjusted less often
- on the other side a fixed regenerative if seldom has to be touched
- an if frequency around 2-3 MHz offers a good ratio, little influence between regeneration and frequency,
good selectivity and sound in the same time
- A lower frequency can be calibrated more accurately, important is the isolation between antenna
and the regenerative stage
- Harmonics of the reception signal are breaking into the if and can cause birdies
- Crosstalk between a regenertive stage in autodyne mode and the mixer are another source of birdies,
at least the regenerative detector has to be in a different tube
- a 455kHz if is too narrow for a good am sound

Feel free, to use this as a source for your own ideas:
http://www.b-weeber.de/bilder/Konverter-Superhet/ECH81_converter_superhet.zip
http://www.b-weeber.de/bilder/Konverter-Superhet/ECH81_converter_superhet.zip

About 2/3 of the circuits have been built and are working. Sometimes the amplification was too little (for my purpose), then i tried to overcome this by reflexing the signal.

Best regards,

Bernd

26908. Re: [regenrx] Re: The ECH81 plus ECL82 Regenerodyne

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-11 01:58:10 UTC
From: Prof. Arnaldo Coro Antich
Topic: 26904 Message: 26908

Dear amigo :Your circuit diagrams are very interesting ... but the need to use quartz crystals of the same or very near the same frequency for a ladder type filter is impossible for me to put in practice, because there are no suppliers of such crystals here.

When I recycle equipment , first parts that go to the treasure chest are the quartz crystals and the computer clock assemblies !!

I fully understand what you explain about the many interacting elements to be taking into consideration when implementing the Regenerodyne receiver concept.

A crystal controlled front end , using well designed input signal attenuator and a bandpass two sections (dual tuned) input filter feeding the also very well built regenerative detector will provide excellent results.

Sure, there is no AGC , and the ¨bandwidth¨ control is fully dependent on reaching the ideal critical operating point for the regenerative detector.

Perhaps for this reason is that I prefer to use a tetrode or pentode vacuum tube detector applying the regeneration control by means of the screen grid voltage. Feeding the regeneration control with very well regulated voltage. With the 6AK5''s a very smooth transition between almost no regeneration and reaching almost the point of oscillation is what makes this detector circuit so attractive to radio hobbysts that enjoy tweaking controls that really do their job.

When very near the oscillation point, one can achieve a very high degree of selectivity, actually on the AM broadcast band it is possible to separate the two sidebands...and that requires around 3 kiloHertz selectivity !!!

73 and DX

Arnie Coro

CO2KK

On 10/08/16 20:19, b_weeber@... [regenrx] wrote:
>
>
> Hello Arnie
>
> Some thoughts about the idea:
>

> - An upconverted range has a smaller frequency ratio, therefore the
> regeneration has to be adjusted less often
> - on the other side a fixed regenerative if seldom has to be touched
> - an if frequency around 2-3 MHz offers a good ratio, little influence
> between regeneration and frequency,
> good selectivity and sound in the same time
> - A lower frequency can be calibrated more accurately, important is
> the isolation between antenna
> and the regenerative stage
> - Harmonics of the reception signal are breaking into the if and can
> cause birdies
> - Crosstalk between a regenertive stage in autodyne mode and the mixer
> are another source of birdies,
> at least the regenerative detector has to be in a different tube
> - a 455kHz if is too narrow for a good am sound
>
> Feel free, to use this as a source for your own ideas:
> http://www.b-weeber.de/bilder/Konverter-Superhet/ECH81_converter_superhet.zip
> <http://www.b-weeber.de/bilder/%0A%20Konverter-Superhet/ECH81_converter_superhet.zip>
>
> About 2/3 of the circuits have been built and are working. Sometimes
> the amplification was too little (for my purpose), then i tried to
> overcome this by reflexing the signal.
>
>
> Best regards,
>
> Bernd
>
>
>
>

26909. Re: The ECH81 plus ECL82 Regenerodyne

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-11 16:28:51 UTC
From: b_weeber@...
Topic: 26904 Message: 26909

** but the need to use quartz crystals of the same or very near the same frequency
** for a ladder type filter is impossible for me to put in practice

Then just leave the crystals away, like i did with the "ECH81_v3.jpg". With this circuit i recognized, how strong cross talking can be within one tube. With or without crystal filter, there was no audible difference. After using two seperate ECH81, with a bw of 250Hz the cw-filter was almost too selective.

Standard crystals here are very cheap, one piece ~20 cent. Hope, in your country this begins to change now. If there is a electronic supplier, then maybe it helps, if many hams asking for crystals.

http://www.b-weeber.de/bilder/Konverter-Superhet/q-multiplier_vs_ssb-ladder-filter.jpg
http://www.b-weeber.de/bilder/Konverter-Superhet/q-multiplier_vs_ssb-ladder-filter.jpg

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http://www.b-weeber.de/bilder/Konverter-Superhet/q-multi...
http://www.b-weeber.de/bilder/Konverter-Superhet/q-multiplier_vs_ssb-ladder-filter.jpg

View on www.b-weeber.de
http://www.b-weeber.de/bilder/Konverter-Superhet/q-multiplier_vs_ssb-ladder-filter.jpg
Preview by Yahoo

** When very near the oscillation point

On a 455kHz regenerative detector i measured a bandwidth of 50Hz/-6dB. Razor sharp, only the stop band attenation could be a little bit better.

Have fun,
Bernd DF3DL

26910. Re: [regenrx] Re: The ECH81 plus ECL82 Regenerodyne

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-11 16:35:44 UTC
From: Cecil Bayona
Topic: 26904 Message: 26910

Cuba is still on the State Department restricted list, so electronic
devices and parts are not allowed to be shipped there.

On 8/11/2016 11:28 AM, b_weeber@... [regenrx] wrote:
>
> ** but the need to use quartz crystals of the same or very near the
> same frequency
> ** for a ladder type filter is impossible for me to put in practice
>
> Then just leave the crystals away, like i did with the "ECH81_v3.jpg".
> With this circuit i recognized, how strong cross talking can be within
> one tube. With or without crystal filter, there was no audible
> difference. After using two seperate ECH81, with a bw of 250Hz the
> cw-filter was almost too selective.
>
> Standard crystals here are very cheap, one piece ~20 cent. Hope, in
> your country this begins to change now. If there is a electronic
> supplier, then maybe it helps, if many hams asking for crystals.
>
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> ** When very near the oscillation point
>
> On a 455kHz regenerative detector i measured a bandwidth of 50Hz/-6dB.
> Razor sharp, only the stop band attenation could be a little bit better.
>

> Have fun,
> Bernd DF3DL
>
> ---
> Posted by: b_weeber@...
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Cecil - k5nwa
http://thepartsplace.k5nwa.com/

26911. Re: [regenrx] Re: The ECH81 plus ECL82 Regenerodyne CUBA

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-11 23:38:30 UTC
From: Rob
Topic: 26904 Message: 26911

I sent Arnie 7.16 ceramic resonators taped to cardboard in a small
letter envelope and he DID get them.
Than later I sent transistors in a larger envelope.... but that package
never arrived ... and was not sent back to me.
Apparently something in this picture is against the rules.....

http://www.learnmorsecode.com/arnie/arnie05032016b.jpg

On 08/11/2016 12:35 PM, Cecil Bayona cecil.bayona@... [regenrx] wrote:
>
> Cuba is still on the State Department restricted list, so electronic
> devices and parts are not allowed to be shipped there.
>
> On 8/11/2016 11:28 AM, b_weeber@... [regenrx] wrote:
>>
>> ** but the need to use quartz crystals of the same or very near the
>> same frequency
>> ** for a ladder type filter is impossible for me to put in practice
>>
>> Then just leave the crystals away, like i did with the
>> "ECH81_v3.jpg". With this circuit i recognized, how strong cross
>> talking can be within one tube. With or without crystal filter, there
>> was no audible difference. After using two seperate ECH81, with a bw
>> of 250Hz the cw-filter was almost too selective.
>>
>> Standard crystals here are very cheap, one piece ~20 cent. Hope, in
>> your country this begins to change now. If there is a electronic
>> supplier, then maybe it helps, if many hams asking for crystals.
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>> ** When very near the oscillation point
>>
>> On a 455kHz regenerative detector i measured a bandwidth of
>> 50Hz/-6dB. Razor sharp, only the stop band attenation could be a
>> little bit better.
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>> Have fun,
>> Bernd DF3DL
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>> Posted by: b_weeber@...
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> Cecil - k5nwa
> http://thepartsplace.k5nwa.com/
>

26912. Re: [regenrx] Re: The ECH81 plus ECL82 Regenerodyne CUBA

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-12 00:53:43 UTC
From: Cecil Bayona
Topic: 26904 Message: 26912

One of four things happened;

1. You sent it in a plain envelope First Class which would be put
through a sorting machines which would shred it.
2. It was suspicious as it was too thick, upon inspection it was
determined to be contraband and trashed, be grateful that charges were
not pursued.
3. It was intercepted by either Customs or Post Office people in Cuba
and kept as goodies to sell.
4. It's sitting in Cuban Customs and will eventually get there.

Take your choice and hope its reason #4

On 8/11/2016 6:38 PM, Rob roomberg@... [regenrx] wrote:
>
> I sent Arnie 7.16 ceramic resonators taped to cardboard in a small
> letter envelope and he DID get them.
> Than later I sent transistors in a larger envelope.... but that
> package never arrived ... and was not sent back to me.
> Apparently something in this picture is against the rules.....
>
> http://www.learnmorsecode.com/arnie/arnie05032016b.jpg
>
>
>
> On 08/11/2016 12:35 PM, Cecil Bayona cecil.bayona@... [regenrx]
> wrote:
>>
>> Cuba is still on the State Department restricted list, so electronic
>> devices and parts are not allowed to be shipped there.
>>
>> On 8/11/2016 11:28 AM, b_weeber@... [regenrx] wrote:
>>>
>>> ** but the need to use quartz crystals of the same or very near the
>>> same frequency
>>> ** for a ladder type filter is impossible for me to put in practice
>>>
>>> Then just leave the crystals away, like i did with the
>>> "ECH81_v3.jpg". With this circuit i recognized, how strong cross
>>> talking can be within one tube. With or without crystal filter,
>>> there was no audible difference. After using two seperate ECH81,
>>> with a bw of 250Hz the cw-filter was almost too selective.
>>>
>>> Standard crystals here are very cheap, one piece ~20 cent. Hope, in
>>> your country this begins to change now. If there is a electronic
>>> supplier, then maybe it helps, if many hams asking for crystals.

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>>> ** When very near the oscillation point
>>>
>>> On a 455kHz regenerative detector i measured a bandwidth of
>>> 50Hz/-6dB. Razor sharp, only the stop band attenation could be a
>>> little bit better.
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>>> Have fun,
>>> Bernd DF3DL
>>> --
>>> Posted by: b_weeber@...
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>> Cecil - k5nwa
>> http://thepartsplace.k5nwa.com/
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> Posted by: Rob <roomberg@...>
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Cecil - k5nwa
http://thepartsplace.k5nwa.com/

26913. Re: [regenrx] Re: The ECH81 plus ECL82 Regenerodyne CUBA

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-12 01:22:52 UTC
From: Rob
Topic: 26904 Message: 26913

So WHY is transtransistors contraband to send to a professor to teach
electronics to newbies?

On 08/11/2016 08:53 PM, Cecil Bayona cecil.bayona@... [regenrx] wrote:
>
> One of four things happened;
>
> 1. You sent it in a plain envelope First Class which would be put
> through a sorting machines which would shred it.
> 2. It was suspicious as it was too thick, upon inspection it was
> determined to be contraband and trashed, be grateful that charges were
> not pursued.
> 3. It was intercepted by either Customs or Post Office people in Cuba
> and kept as goodies to sell.
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> Take your choice and hope its reason #4
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> On 8/11/2016 6:38 PM, Rob roomberg@... [regenrx] wrote:
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>> I sent Arnie 7.16 ceramic resonators taped to cardboard in a small
>> letter envelope and he DID get them.
>> Than later I sent transistors in a larger envelope.... but that
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>> http://www.learnmorsecode.com/arnie/arnie05032016b.jpg
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>> On 08/11/2016 12:35 PM, Cecil Bayona cecil.bayona@... [regenrx]
>> wrote:
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>>> Cuba is still on the State Department restricted list, so electronic
>>> devices and parts are not allowed to be shipped there.
>>>
>>> On 8/11/2016 11:28 AM, b_weeber@... [regenrx] wrote:
>>>>
>>>> ** but the need to use quartz crystals of the same or very near the
>>>> same frequency
>>>> ** for a ladder type filter is impossible for me to put in practice
>>>>
>>>> Then just leave the crystals away, like i did with the
>>>> "ECH81_v3.jpg". With this circuit i recognized, how strong cross
>>>> talking can be within one tube. With or without crystal filter,

>>>> there was no audible difference. After using two seperate ECH81,
>>>> with a bw of 250Hz the cw-filter was almost too selective.
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>>>> Standard crystals here are very cheap, one piece ~20 cent. Hope, in
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>>> Cecil - k5nwa
>>> http://thepartsplace.k5nwa.com/
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>> Posted by: Rob <roomberg@...>
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> Cecil - k5nwa
> http://thepartsplace.k5nwa.com/
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26914. Re: [regenrx] Re: The ECH81 plus ECL82 Regenerodyne CUBA

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-12 04:51:40 UTC
From: Cecil Bayona
Topic: 26904 Message: 26914

Because the State Department has placed Cuba on a Restricted Technology list, so shipping of electronics is prohibited.

Lest you forget Cuba has been for many years fomenting unrest in Latin America and the Caribbean, so they declared Cuba a Embargoed State that should not get electronic components. Burma, Afghanistan, Libya, Yemen, Iran, North Korea, Somalia, Yemen, and several other countries are on the list where sending electronic components are prohibited. About the only stuff allowed is food, and medicine.

Right or wrong it is the law and technically one commits a felony by disregarding the statues although they sometime ignore small quantities, but there is no guarantee that they will.

On 8/11/2016 8:22 PM, Rob roomberg@... [regenrx] wrote:
>
> So WHY is transtransistors contraband to send to a professor to teach
> electronics to newbies?
>
> On 08/11/2016 08:53 PM, Cecil Bayona cecil.bayona@... [regenrx]
> wrote:
>>
>> One of four things happened;
>>
>> 1. You sent it in a plain envelope First Class which would be put
>> through a sorting machines which would shred it.
>> 2. It was suspicious as it was too thick, upon inspection it was
>> determined to be contraband and trashed, be grateful that charges
>> were not pursued.
>> 3. It was intercepted by either Customs or Post Office people in Cuba
>> and kept as goodies to sell.
>> 4. It's sitting in Cuban Customs and will eventually get there.
>>
>> Take your choice and hope its reason #4
>>
>> On 8/11/2016 6:38 PM, Rob roomberg@... [regenrx] wrote:
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>>> I sent Arnie 7.16 ceramic resonators taped to cardboard in a small
>>> letter envelope and he DID get them.
>>> Than later I sent transistors in a larger envelope.... but that
>>> package never arrived ... and was not sent back to me.
>>> Apparently something in this picture is against the rules.....
>>>
>>> http://www.learnmorsecode.com/arnie/arnie05032016b.jpg
>>>
>>>

>>>
>>> On 08/11/2016 12:35 PM, Cecil Bayona cecil.bayona@...
>>> [regenrx] wrote:
>>>>
>>>> Cuba is still on the State Department restricted list, so
>>>> electronic devices and parts are not allowed to be shipped there.
>>>>
>>>> On 8/11/2016 11:28 AM, b_weeber@... [regenrx] wrote:
>>>>>
>>>>> ** but the need to use quartz crystals of the same or very near
>>>>> the same frequency
>>>>> ** for a ladder type filter is impossible for me to put in practice
>>>>>
>>>>> Then just leave the crystals away, like i did with the
>>>>> "ECH81_v3.jpg". With this circuit i recognized, how strong cross
>>>>> talking can be within one tube. With or without crystal filter,
>>>>> there was no audible difference. After using two seperate ECH81,
>>>>> with a bw of 250Hz the cw-filter was almost too selective.
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>>>>> Standard crystals here are very cheap, one piece ~20 cent. Hope,
>>>>> in your country this begins to change now. If there is a
>>>>> electronic supplier, then maybe it helps, if many hams asking for
>>>>> crystals.
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jpg>www.b-weeber.de
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>>>>> Preview by Yahoo
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>>>>>
>>>>> ** When very near the oscillation point

>>>>>
>>>>> On a 455kHz regenerative detector i measured a bandwidth of
>>>>> 50Hz/-6dB. Razor sharp, only the stop band attenation could be a
>>>>> little bit better.
>>>>>
>>>>> Have fun,
>>>>> Bernd DF3DL
>>>>> ---
>>>>> Posted by: b_weeber@...
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>>>> Cecil - k5nwa
>>>> http://thepartsplace.k5nwa.com/
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>>> Posted by: Rob <roomberg@...>
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Cecil - k5nwa
http://thepartsplace.k5nwa.com/

26915. Re: [regenrx] Re: The ECH81 plus ECL82 Regenerodyne CUBA

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-12 07:40:35 UTC
From: Rob
Topic: 26904 Message: 26915

Thanks for the rules.
I had no idea Cuba was on the same sh**list as Iran and North Korea.

I have no childhood memory of the Cuban missle crisis and
I was 4 years old when President Kennedy was assassinated .
I remember that day like it happened yesterday.

I was sort of hoping things were changing:

http://www.t42us.com
http://www.t42us.com/team_antenna5088867_osm.jpg

ARNIE:
http://www.t42us.com/813.JPG

These are Americans in Cuba
3 of them are my neighbors.

http://www.t42us.com/Ruth_Operating_0674sm.jpg
http://www.t42us.com/steph_rob0133sm.jpg
http://www.t42us.com/904.JPG

On 08/12/2016 12:51 AM, Cecil Bayona cecil.bayona@... [regenrx] wrote:
>
> Because the State Department has placed Cuba on a Restricted
> Technology list, so shipping of electronics is prohibited.
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> Lest you forget Cuba has been for many years fomenting unrest in Latin
> America and the Caribbean, so they declared Cuba a Embargoed State
> that should not get electronic components. Burma, Afghanistan, Libya,
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> are on the list where sending electronic components are prohibited.
> About the only stuff allowed is food, and medicine.
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> Right or wrong it is the law and technically one commits a felony by
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>>>> Than later I sent transistors in a larger envelope.... but that
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>>>> [regenrx] wrote:
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>>>>> On 8/11/2016 11:28 AM, b_weeber@... [regenrx] wrote:
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>>>>>> ** but the need to use quartz crystals of the same or very near
>>>>>> the same frequency
>>>>>> ** for a ladder type filter is impossible for me to put in practice
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>>>>>> Standard crystals here are very cheap, one piece ~20 cent. Hope,
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>>>>>> electronic supplier, then maybe it helps, if many hams asking for
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>>>>> Cecil - k5nwa
>>>>> http://thepartsplace.k5nwa.com/
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>>>> ----------
>>>> Posted by: Rob <roomberg@...>
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26916. RE: [regenrx] Re: The ECH81 plus ECL82 Regenerodyne CUBA

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-12 12:57:26 UTC
From: Larry
Topic: 26904 Message: 26916

What a shame. At least our government has not gone that bad – YET!.

Larry

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Thursday, August 11, 2016 7:39 PM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Re: The ECH81 plus ECL82 Regenerodyne CUBA

I sent Arnie 7.16 ceramic resonators taped to cardboard in a small letter envelope and he DID get them.
Than later I sent transistors in a larger envelope.... but that package never arrived ... and was not sent back to me.
Apparently something in this picture is against the rules.....

http://www.learnmorsecode.com/arnie/arnie05032016b.jpg

On 08/11/2016 12:35 PM, Cecil Bayona cecil.bayona@... [regenrx] wrote:

Cuba is still on the State Department restricted list, so electronic devices and parts are not allowed to be shipped there.

On 8/11/2016 11:28 AM, b_weeber@... [regenrx] wrote:

** but the need to use quartz crystals of the same or very near the same frequency
** for a ladder type filter is impossible for me to put in practice

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<http://www.b-weeber.de/bilder/Konverter-Superhet/q-multiplier_vs_ssb-ladder-filter.jpg>
View on www.b-weeber.de

Preview by Yahoo

** When very near the oscillation point

On a 455kHz regenerative detector i measured a bandwidth of 50Hz/-6dB. Razor sharp, only the stop band attenation could be a little bit better.

Have fun,
Bernd DF3DL

Posted by: b_weeber@...

--
Cecil - k5nwa
http://thepartsplace.k5nwa.com/

26917. RE: The ECH81 plus ECL82 Regenerodyne

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-12 18:52:19 UTC
From: Bry Carling
Topic: 26904 Message: 26917

Good luck finding 455 kHz crystals of good quality for 20 cents each.

If you know of a source at that price, we would be glad to know it!

Bry Carling,
AF4K Crystals

Posted by: b_weeber@... b_weeber
Date: Thu Aug 11, 2016 9:28 am ((PDT))

** but the need to use quartz crystals of the same or very near the same frequency
** for a ladder type filter is impossible for me to put in practice

Then
just leave the crystals away, like i did with the "ECH81_v3.jpg". With
this circuit i recognized, how strong cross talking can be within one
tube. With or without crystal filter, there was no audible difference.
After using two seperate ECH81, with a bw of 250Hz the cw-filter was
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Standard crystals here are very cheap, one
piece ~20 cent. Hope, in your country this begins to change now. If
there is a electronic supplier, then maybe it helps, if many hams asking
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http://www.b-weeber.de/bilder/Konverter-Superhet/q-multiplier_vs_ssb-ladder-filter.jpg

http://www.b-weeber.de/bilder/Konverter-Superhet/q-multi...
http://www.b-weeber.de/bilder/Konverter-Superhet/q-multiplier_vs_ssb-ladder-filter.jpg

26918. FS: Slinky Dipole and a G5RV Dipole

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-12 19:47:52 UTC
From: Bry Carling
Topic: 26918 Message: 26918

FOR SALE: ANTENNAS

Slinky Dipole antenna system with center connector for standard PL259
plug on your coaxial feed line. Continuous inductance line, may be
adjusted in length to suit any HF band.

Excellent condition. Was used by a ham who became a silent key. He found
it very effective in the HF bands when used indoors across the ceiling.

Available for only $22.00 plus shipping. rthgrehgrt
Excellent
condition. Was used by a ham who became a silent key. He found it very
effective in the HF bands when used indoors across the ceiling.
Available for only $22.00 plus shipping.
Contact - Brian AF4K at:Slinky
Dipole antenna system with center connector for standard PL259 plug on
your coaxial feed line. Continuous inductance line, may be adjusted in
length to suit any HF band.
Excellent
condition. Was used by a ham who became a silent key. He found it very
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your coaxial feed line. Continuous inductance line, may be adjusted in
length to suit any HF band.
Excellent
condition. Was used by a ham who became a silent key. He found it very
effective in the HF bands when used indoors across the ceiling.
Available for only $22.00 plus shipping.
Contact - Brian AF4K at:

Also
- a brand new W8AMZ version of the G5RV Dipole. Excellent all band HF
antenna for 80m through 10m bands. This is the improved version, as sold
on e-Bay and elsewhere for $95.00 plus shipping. I think I paid
$105.00 total for this excellent antenna. NEVER USED IT! Brand new in the package as it
came. You can't
beat this deal! Will sell for $50.00 plus shipping

73 - Bry Carling
Please reply offlist to:
af4k (AT) hotmail (DOT) com

26919. 716 regen uses only 2mA

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-13 17:17:38 UTC
From: Rob
Topic: 26919 Message: 26919

I got a phone call and ran away from the workbench without
unplugging the 9 volt battery from the 716 circuit.
More than 12 hours later I returned and discovered a CW contest blasting
away on the workbench.
To my dismay..... I thought I had erroneously killed off
....another... $5 duracell battery.....
but how could this still be running??????

I tested it in series with a digi ameter and it said 2 mA.

JUST 2mA?
I used to have an ICOM 706 that snarfed down 2 AMPs on receive... would
kill a fully charged car
battery in less than 8 hours.

I did not test any of the external amplifiers yet for amperage draw.
Mostly because I have not picked a permanent circuit yet to add to the
716 circuit.

http://www.learnmorsecode.com/716/etch/index.html

http://www.learnmorsecode.com/amp/tl431.html

26920. FS: Dummy Load

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-16 20:31:39 UTC
From: Bry Carling
Topic: 26920 Message: 26920

For sale: Philco Model 160-100D. This is a 100 watt Dummy Load rated to VHF, UHF if not SHF ranges.

Comes with an "N" connector, and also an adapter for PL259 connection.

Will sell for $29.00 plus shipping.

Please reply off the list.

73 de AF4K - Bry

26921. FS: Knightkit Spanmaster

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-16 20:36:07 UTC
From: Bry Carling
Topic: 26921 Message: 26921

Knightkit Spanmaster REGEN receiver 1958 from Allied Radio Co.

Nice piece of history here but also a usable receiver!
Restored mostly. It works., Has a new AC power cord, and a new front panel nicely constructed.
Otherwise original. Speaker cone has a tear but it works. I am sure this has an interestingstory.
Needs a cabinet but works as-is. From an estate here in Florida.

Available for $35.00 plus shipping.

Pictures on request via e-mail please.

73 de AF4K, Bry

26922. RE: Spanmaster

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-17 12:25:49 UTC
From: Bry Carling
Topic: 16541 Message: 26922

The Knight-Allied Spanmaster has been sold pending payment.
73 - Bry, AF4K

> Posted by: "Bry Carling" af4k@... radios_r_me
> Date: Tue Aug 16, 2016 1:37 pm ((PDT))
>
> Knightkit Spanmaster REGEN receiver 1958 from Allied Radio Co.
>
> Nice piece of history here but also a usable receiver!
> Restored mostly. It works., Has a new AC power cord, and a new front panel nicely constructed.
> Otherwise original. Speaker cone has a tear but it works. I am sure this has an interestingstory.
> Needs a cabinet but works as-is. From an estate here in Florida.
>
> Available for $35.00 plus shipping.
>
> Pictures on request via e-mail please.
>
> 73 de AF4K, Bry
>
>
>
> Messages in this topic (1)
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> "In the interest of Regenerating radio's lost art of Regeneration"
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> Yahoo Groups Links
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26923. OT a little breadboard material question

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-18 01:54:07 UTC
From: William Wood
Topic: 26923 Message: 26923

Greetings and Salutations
I just bought a big beautiful breadboard
brand name is ‘Marketplace’. 12” x 16” x 1”.
Looking to use this for an experimenter’s board
and before I give it the marine spar treatment
would like to take a stain out of it. Right in the
middle of the board there is a mold or some kind
of stain I would like to remove… Thought about
bleach, but too late tonight to play with it, so
thought I’d run it by you guys for a hint or two…
A Good Will special :)
73 Everyone
Bill KE9XQ

26924. Re: [regenrx] OT a little breadboard material question

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-18 02:19:29 UTC
From: Charles Moizeau
Topic: 26923 Message: 26924

Bill,

Scratch the offending spot with the pointy end of a sharp pocket knife to determine the depth of the stain. If it's shallow, power sand the whole board until the stain is gone. If it's deep, note its location and choose a component from your next electronic project whose size will mask the blemish.

Only you will know "what evil lurks in the" breadboard!

Regards,

Charles

From: regenrx@yahoogroups.com <regenrx@yahoogroups.com> on behalf of William Wood ke9xq@charter.net [regenrx] <regenrx@yahoogroups.com>
Sent: Wednesday, August 17, 2016 9:54 PM
To: Rob roomberg@... [regenrx]
Subject: [regenrx] OT a little breadboard material question

Greetings and Salutations
I just bought a big beautiful breadboard
brand name is 'Marketplace'. 12" x 16" x 1".
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would like to take a stain out of it. Right in the
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A Good Will special :)
73 Everyone
Bill KE9XQ

"In the interest of Regenerating radio's lost art of Regeneration"

Yahoo Groups Links

Yahoo! Groups<http://groups.yahoo.com/group/regenrx/>
groups.yahoo.com
/

26925. Re: [regenrx] OT a little breadboard material question

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-18 02:25:13 UTC
From: William Wood
Topic: 26923 Message: 26925

Gud un
Thanks :)

On Aug 17, 2016, at 9:19 PM, Charles Moizeau w2sh@...m [regenrx] <regenrx@yahoogroups.com> wrote:

>
> Bill,
>
>
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> Scratch the offending spot with the pointy end of a sharp pocket knife to determine the depth of the stain. If it's shallow, power sand the whole board until the stain is gone. If it's deep, note its location and choose a component from your next electronic project whose size will mask the blemish.
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> Only you will know "what evil lurks in the" breadboard!
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> Regards,
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> Charles
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> Sent: Wednesday, August 17, 2016 9:54 PM
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> 73 Everyone
> Bill KE9XQ
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> Yahoo Groups Links
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> Yahoo! Groups
> groups.yahoo.com
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26926. test

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-18 23:50:02 UTC
From: Phil
Topic: 1935 Message: 26926
Attachments: 1 described; binary payloads are missing from this source WARC

Just a test, I haven't received any email from ANY Yahoo group for several hours. Highly unusual!!

--
73 From "The Beaconeer's Lair"
Specializing in DXing NDBs (Longwave Beacons)
Phil, KO6BB
http://www.qsl.net/ko6bb/

HF/LF RADIOS:
Grundigs: S-350 (~2006), G6 (2011) & S450DLX (2014).
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
Icom: IC-735 Transceiver, 500Hz CW filter (~1990).
Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
Icom: IC-7200 Transceiver (~2015).
Kenwood: TS-450SAT Transceiver.
R-Shack: DX-380 digital portable (~1990).
SDR: Softrock Ensemble II LF (built from a kit 2015).
Zenith: Royal-7000 Transoceanic Portable (~1968).

ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 4 Port Multicoupler, Feeds Antenna to 4 RX's.
HOMEBREW 8 Hz Audio Filter.
Timewave DSP-599zx Audio Filter.

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

26927. what is this simple circuit doing

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-19 07:31:03 UTC
From: Rob
Topic: 26927 Message: 26927

I bought an $18 laminator to do PCB toner transfers.... understanding that the temperature controls need to be hacked to raise up to toner melting temps.

I documented the circuit board in the new laminator here:
http://www.learnmorsecode.com/laminator/al9.html

I am very puzzled how this circuit actually works:
http://www.learnmorsecode.com/laminator/al9circuit.jpg

There are two thermal snap switches that are normally on and they turn off when they reach their
snap temperature at 248 F and 293 F.
That sort of makes sense but not.....
because the two snap switches are in parallel.
So when the heat comes up to 248 degrees and one snaps off then the other is still on until it hits 293 degrees. I don't get it. WHY have the 248 degree snap switch at all.

There are two separate LED circuits made of a 1N4007 then 18K then LED connected directly to AC mains power.

I am a little confused about the green light circuit.
I am not aware of any other sensors or switches hidden in the heaters.
The heaters are 69 ohms when cold so with so little resistoance when cold I don't see why
power doesn't make it to that green LED ALL the time.

So if it gets turned on it looks to me like current flows through the heaters and into the green LED...regardless of the state of the snap switches.
BUT
the green light is supposed to indicate that the temperature IS high enough to laminate... so I think I am missing what triggers a "hot enough" state of that green LED.

This is a total teardown at this time.
Wires are cut. Thermostat switches are removed.
Thermal fuse is removed.
Motor is removed.

It COULD all go back together but I have no intention of using the 420 F thermal line fuse or the 293 F snap switch.
The goal is to hump out into 340 degree land and possibly 390 because brother toner melts at a higher temperature.

I just want to understand the circuit first before adding a PIC16F628 and thermister feedback control.

26928. Re: what is this simple circuit doing

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-19 09:50:39 UTC
From: Brad Fayette
Topic: 26927 Message: 26928

When the 2 switches are closed, the green LED will be off. This is because current will take the path of least resistance, which is through the closed switches. When they are both open it will turn on. As for having 2 switches, it all depends upon mechanical placement. I would say that there must be 2 spots in this device which have to be at a minimum temp in order for it to work right. HTH.

--
Regards,

Brad Fayette
"Blessed are the geeks, for they shall inherit the earth."

26929. Re: [regenrx] FETs

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-19 13:59:32 UTC
From: d29602960@...
Topic: 26852 Message: 26929

Hi Tom,

Please excuse the intrussion only something you recently wrote peaked my interest. I read a recent posting of yours on the Yahoo regenrx group in which you wrote the following...

Tom wrote:
I've exploited that symmetry to use the standard feedback trick to linearize them when used as voltage-controlled attenuators, and I've never had to trim the feedback resistor more than an amount roughly equal to the resistor tolerances.
*** End quote ***

From the above would I be correct in thinking that you apply feedback in order to "smooth out" the control range of the JFET when used as a varable resistor/attenuator element to avoid the abrupt change from high resistance to fully saturated?

I would be very interested if you could supply a rough schematic or point me in the right direction for a practical example of such a circuit. While I have seen a number of attenuators using JFETs I have (so far) not seen a practical example of one using feedback to linearize the change in attenuation with respect to control bias.

Many texts describe the use of JFETs as possible variable attenuator elements but fail to provide enough practical information to use them as anything more than a switch in some cases due to the lack of control feedback.

Thanks for reading this and I look froward to heraing from you.

73,s

Des (M0AYF & GQRP 9788)

26930. Re: [regenrx] Re: what is this simple circuit doing

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-19 14:38:01 UTC
From: Daniel Donnelly
Topic: 26927 Message: 26930

While I have never seen this particular device, In my misspent youth as an appliance repairman, I have seen many heating devices with two thermal switches. IN ALL INSTANCES THAT SECOND SWITCH (usually a fuseable link, a second higher temperature "snap"switch or a tilt switch) WAS A SAFETY DEVICE INTENDED TO SHUT DOWN THE APPLIANCE IF THE FIRST ONE FAILED!.
The use of a "safety" switch was mandated by fedgov In the 50's when it was noticed that a rash of home fires were caused by a certain GE appliance being left on and Murphy's 23 law of thermodynamics came into play (the temperature control switch failed).
In your case the 420 deg. link is the safety switch. I understand that you think that the PIC temp controller is safe, and it probably is, but please if you value your safety don't leave it out. REMEMBER MURPHYS FIRST LAW OF ENGINEERING (or tinkering) : EVENTUALLY, IF ANYTHING CAN POSSIBLY GO WRONG ,,, IT WILL!
Dan

On Fri, Aug 19, 2016 at 2:50 AM, Brad Fayette brad@... [regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> When the 2 switches are closed, the green LED will be off. This is
> because current will take the path of least resistance, which is through
> the closed switches. When they are both open it will turn on. As for
> having 2 switches, it all depends upon mechanical placement. I would say
> that there must be 2 spots in this device which have to be at a minimum
> temp in order for it to work right. HTH.
>
> --
> Regards,
>
> Brad Fayette
> "Blessed are the geeks, for they shall inherit the earth."
>
>
>

26931. Re: [regenrx] Re: what is this simple circuit doing we have a winner

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-19 15:26:26 UTC
From: Rob
Topic: 26927 Message: 26931

I got a lot of responses really fast,
THANK YOU EVERYBODY

This makes sense to me.

So moving forward.....
The 420 thermal fuse needs to be raplaced......
something a little higher than the target toner heat temperature.
Found them on EBAY for all sorts of tempratures not far above 420.
So I'll get a few and start with the 420 and if the 420 pops after doing
the toner temp mod I'll move up a little until I fund one that doesn't pop.

Move to come.... this is a fun one.

On 08/19/2016 05:50 AM, Brad Fayette brad@... [regenrx] wrote:
>
> When the 2 switches are closed, the green LED will be off. This is
> because current will take the path of least resistance, which is through
> the closed switches. When they are both open it will turn on. As for
> having 2 switches, it all depends upon mechanical placement. I would say
> that there must be 2 spots in this device which have to be at a minimum
> temp in order for it to work right. HTH.
>
> --
> Regards,
>
> Brad Fayette
> "Blessed are the geeks, for they shall inherit the earth."
>
>
> --
>

26932. PCB laminator thermal sensors and fuses rebuilds parts

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-20 04:26:08 UTC
From: Rob
Topic: 26932 Message: 26932

There are two kinds of heat control method circuits in the laminators.
Method one is a comparator circuit that looks at a thermistor for resistance and the
easiest to hack.. by simply adding resistance to the thermistor feed line..... the comparator still thinks its cool so keep the heaters on a wee bit longer.

Method two is a thermal snap switch....pretty much just like a circuit breaker..... that pops off when the
temperature reaches a specific desired point.
This hack requires ripping out the existing thermal snap switch and replacing it with a higher temperature...then maybe needing to replace the thermal fuse also:

Both methods also employ a one time thermal fuse that will shut it all off for good if it reaches
melt down temperatures.
My laminators both had 420 F limit thermal fuses.
So I took a run down EBAY lane and found that you can buy thermal fuses for 13 cents....
so I ordered a kit of assorted values.
Noting that what ever heat appliance project we get to play with.....
there may be the need
to remove and replace this safety device.... perhaps with the next value higher than the
"method two thermal snap switch" mentioned above.

EBAY:
100pcs SF113E to SF240E SEFUSE Cutoffs NEC Thermal Fuse 10A 250V Assortment Kit

total with shipping $13.21. Just amazing. 13 cents

10 x SF113E 113°C 235 F
10 x SF119E 121°C 250 F
10 x SF129E 133°C 271 F
10 x SF139E 142°C 288 F
10 x SF152E 157°C 315 F
10 x SF169E 172°C 342 F
10 x SF188E 192°C 378 F
10 x SF214E 216°C 421 F
10 x SF226E 227°C 441 F
10 x SF240E 240°C 464 F
++

Finding the correct thermal snap switch may require some experimenting based on the toner
your laser printer uses.

I found multiple toner transfer articles on the web saying you need 170c-338F to melt and transfer
the toner BUT then more advice saying BROTHER toner melts at even higher at 370F.
Noting that the standard plastic pouch melting lamanitor using the thermal snap switch
is 145c -- 293 F so that explains why it takes 20 passes through a standard laminator to get
the toner to stick to the copper... if it ever sticks at all.... its just not hot enough.

I could not find a 190c but I did find a 200c thermal snap switch on EBAY.

HOTTER may not always mean BETTER to us.
If its too hot then the copper may delaminate off the PCB so lower is batter.

Toner get sticker and transfers to copper but tone CAN liquify at just a little hotter than
sticky temperature and then the roller pressure may squirt the liguid toner.

So then this raises the question of WILL 200c ...392 work with the BROTHER toner... or is that too hot?

More experiments coming.

170 c 338 F thermal snap switches cost ONE dollar:

EBAY:
10pcs-Temperature-Switch-Thermostat-KSD301-KSD302-170-C-NC

200 c === 392 F for $1

EBAY:
10pcs NO 5°C ~ NC 200°C 12 Values Temperature Switch Thermostat KSD301 (KSD302)

++

And then there is the motor speed hack.

Perhaps the temperature is perfect..... then comes HOW many times do you need to
pass the PCB through the rollers to get the desired toner transfer?

Some of the web hacks say you can build a fancy motor controller....
PIC16F84 stuff.....
and pulse the roller to move snail slow.... 1/2 a second motor on time then 10 seconds motor
off time to get the perfect one pass toner transfer.

The motors in my two laminators are 6 rpm and 4 rpm.
BUT
I broke the 6 RPM motor then ordered two on EBAY... and just for
fun...one of them is 3 RPM.
So when that shows up then perhaps an experiment with just plain
replacing the 6 with a 3 may make
it slow enough for a one pass toner transfer.
Noting that these motors cost just $5.

Soooooo.... I will document what works here when all the peices show up.
If the replacement of the 145c thermal switch with a 170c thermal switch
is enough to get good toner tranfers with the new $18 laminator then
that means we all can easily do this for under $20.

http://www.learnmorsecode.com/laminator/index.html

26933. Re: [regenrx] PCB laminator thermal sensors and fuses rebuilds parts

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-20 05:37:59 UTC
From: Jim Pruitt
Topic: 26932 Message: 26933

I would like to find d some thermal fuses but the highest I have found is 240 degrees and if running 370 degrees then a 240 might not work well. Yes I know you would leave it out but I like to play it safe. Did you have an auction number for the thermal fuse assortment?

Do you have links to info on what is needed (code) for the 16F84 and 16F628?

You mention multiple passes. Take a look at the Jameco kit to modify the Alps AL13P for single pass. I got the kit but refuse to pay over $200 for the laminator. There is an AL13 cheap but it is not industrial and don't think it is even close to the 13P.

I still like the DJ Delorie laminstir controller but have not found hardware for programming the Renaissance R8C-28 that he uses.

Thank you.

Jim

On Aug 19, 2016 9:26 PM, "Rob roomberg@... [regenrx]" <regenrx@yahoogroups.com> wrote:

>
>
> There are two kinds of heat control method circuits in the laminators.
> Method one is a comparator circuit that looks at a thermistor for
> resistance and the
> easiest to hack.. by simply adding resistance to the thermistor feed
> line..... the comparator still thinks its cool so keep the heaters on a wee
> bit longer.
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> Method two is a thermal snap switch....pretty much just like a circuit
> breaker...... that pops off when the
> temperature reaches a specific desired point.
> This hack requires ripping out the existing thermal snap switch and
> replacing it with a higher temperature...then maybe needing to replace the
> thermal fuse also:
>
> Both methods also employ a one time thermal fuse that will shut it all off
> for good if it reaches
> melt down temperatures.
> My laminators both had 420 F limit thermal fuses.
> So I took a run down EBAY lane and found that you can buy thermal fuses
> for 13 cents....
> so I ordered a kit of assorted values.
> Noting that what ever heat appliance project we get to play with.....
> there may be the need

> to remove and replace this safety device.... perhaps with the next value
> higher than the
> "method two thermal snap switch" mentioned above.
>
> EBAY:
> 100pcs SF113E to SF240E SEFUSE Cutoffs NEC Thermal Fuse 10A 250V
> Assortment Kit
>
> total with shipping $13.21. Just amazing. 13 cents
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> 10 x SF139E 142°C 288 F
> 10 x SF152E 157°C 315 F
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> 10 x SF188E 192°C 378 F
> 10 x SF214E 216°C 421 F
> 10 x SF226E 227°C 441 F
> 10 x SF240E 240°C 464 F
> ++
>
> Finding the correct thermal snap switch may require some experimenting
> based on the toner
> your laser printer uses.
>
> I found multiple toner transfer articles on the web saying you need
> 170c-338F to melt and transfer
> the toner BUT then more advice saying BROTHER toner melts at even higher
> at 370F.
> Noting that the standard plastic pouch melting lamanitor using the thermal
> snap switch
> is 145c -- 293 F so that explains why it takes 20 passes through a
> standard laminator to get
> the toner to stick to the copper... if it ever sticks at all.... its just
> not hot enough.
>
> I could not find a 190c but I did find a 200c thermal snap switch on EBAY.
>
> HOTTER may not always mean BETTER to us.
> If its too hot then the copper may delaminate off the PCB so lower is
> batter.
>
> Toner get sticker and transfers to copper but tone CAN liquify at just a
> little hotter than
> sticky temperature and then the roller pressure may squirt the liguid
> toner.
>
> So then this raises the question of WILL 200c ...392 work with the BROTHER
> toner... or is that too hot?

>
> More experiments coming.
>
> 170 c 338 F thermal snap switches cost ONE dollar:
>
> EBAY:
> 10pcs-Temperature-Switch-Thermostat-KSD301-KSD302-170-C-NC
>
>
> 200 c === 392 F for $1
>
> EBAY:
> 10pcs NO 5°C ~ NC 200°C 12 Values Temperature Switch Thermostat KSD301
> (KSD302)
>
> ++
>
> And then there is the motor speed hack.
>
> Perhaps the temperature is perfect..... then comes HOW many times do you
> need to
> pass the PCB through the rollers to get the desired toner transfer?
>
> Some of the web hacks say you can build a fancy motor controller....
> PIC16F84 stuff.....
> and pulse the roller to move snail slow.... 1/2 a second motor on time
> then 10 seconds motor
> off time to get the perfect one pass toner transfer.
>
> The motors in my two laminators are 6 rpm and 4 rpm.
> BUT
> I broke the 6 RPM motor then ordered two on EBAY... and just for fun...one
> of them is 3 RPM.
> So when that shows up then perhaps an experiment with just plain replacing
> the 6 with a 3 may make
> it slow enough for a one pass toner transfer.
> Noting that these motors cost just $5.
>
> Soooooo.... I will document what works here when all the peices show up.
> If the replacement of the 145c thermal switch with a 170c thermal switch
> is enough to get good toner tranfers with the new $18 laminator then that
> means we all can easily do this for under $20.
>
> http://www.learnmorsecode.com/laminator/index.html
>
>
>
>

26934. Re: [regenrx] FETs

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-21 09:51:08 UTC
From: d29602960@...
Topic: 26852 Message: 26934

Hi Tom,

Please excuse the intrussion only something you recently wrote in peaked my interest. I read a recent posting of yours (message #26857 on the Yahoo regenrx group) in which you wrote the following...

Tom wrote:
I've exploited that symmetry to use the standard feedback trick to linearize them when used as voltage-controlled attenuators, and I've never had to trim the feedback resistor more than an amount roughly equal to the resistor tolerances.
*** End quote ***

From the above would I be correct in thinking that you apply feedback in order to "smooth out" the control range of the JFET when used as a varable resistor/attenuator element to avoid the abrupt change from high resistance to fully saturated?

I would be very interested if you could supply a rough schematic or point me in the right direction for a practical example of such a circuit. While I have seen a number of attenuators using JFETs I have (so far) not seen a practical example of one using feedback to linearize the change in attenuation with respect to control bias.

Many texts describe the use of JFETs as possible variable attenuator elements but fail to provide enough practical information to use them as anything more than a switch in some cases due to the lack of control feedback.

Thanks for reading this and I look froward to hearing from you.

73,s

Des (M0AYF & GQRP 9788)

26935. Re: FETs

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-21 11:56:15 UTC
From: b_weeber@...
Topic: 26852 Message: 26935

Here is a collection of circuits.
Some of the audio agc circuits are working with this kind of JFet attenuation:
http://www.qsl.net/va3iul/Homebrew_RF_Circuit_Design_Ideas/Homebrew_RF_Circuit_Design_Ideas.htm#AGC%20Circuits http://www.qsl.net/va3iul/Homebrew_RF_Circuit_Design_Ideas/Homebrew_RF_Circuit_Design_Ideas.htm#AGC%20Circuits

26936. Re: [regenrx] Re: FETs collection of circuits

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-21 19:28:35 UTC
From: Rob
Topic: 26852 Message: 26936

Daz a lot of circuits.
Have you build any Jfet AGC circuits that you can point to a picture there ?

On 08/21/2016 07:56 AM, b_weeber@... [regenrx] wrote:
>
> Here is a collection of circuits.
> Some of the audio agc circuits are working with this kind of JFet
> attenuation:
> http://www.qsl.net/va3iul/Homebrew_RF_Circuit_Design_Ideas/Homebrew_RF_Circuit_Design_Ideas.htm#AGC%20Circuits
>
>
> --
>

26937. Artone Jr. #1

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-21 21:01:39 UTC
From: deadgoose@...
Topic: 26937 Message: 26937

Rummaging through the photos in this group, I came across three showing the "Artone Jr. #1" receiver, using a 1D8GT. This is the radio that I got me started in the hobby. However, the one I had, IIRC, had a paper template that was cemented to the plywood base to show the location of the various parts.

I got a set of plug in coils, and morphed it into a short wave radio. I also built an audio amplifier with a #30 tube, circuit for "Boy's First Book of Radio" by Alfred P. Morgan, so that I could drive a small loud speaker.

Anybody on the group ever build this radio, or know more about it? The interesting feature is using the grid leak R/C in the bottom of the coil, as the triode part (with the grid cap) is connected directly to the "hot" side of the tank coil and tuning capacitor. Mine also must have been made from surplus parts, as the tuning capacitor was a dual unit from a superhet receiver with the LO section removed.

IIRC, I got mine about 1949 or 1950.

73 /paul W3FIS

26938. Re: FETs

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-21 21:33:43 UTC
From: b_weeber@...
Topic: 26852 Message: 26938

Hello Rob

This is the circuit, i have built, similar ones can be found there:
https://groups.yahoo.com/neo/groups/regenrx/files/Exchange/Rx_40m_AGC.gif
https://groups.yahoo.com/neo/groups/regenrx/files/Exchange/Rx_40m_AGC.gif

To get enough dynamic range, two stages are neccessary. That might either be two audio amps or, like in my case, one if stage and one audio stage. The amplification can be regulated from ~1...100. This kind of circuit should work behind of a regenerative detector as well.

Typically an agc has an short attack and a slow release time. The attack time is a compromise, if the attack time is too fast, then without noise blanker sparks can make any reception impossible.

Best regards,
Bernd

26939. RE: [regenrx] Artone Jr. #1

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-21 22:19:17 UTC
From: Hubert Miller
Topic: 26937 Message: 26939

I have been for the last week sorting my books and manuals, sorting some with like subject, some to sell, some to try to donate. (Finding a site that will scan and host online

is not so easy.) I had been keeping equipment manuals in one place, but i decided to try to keep them with the equipment so far as possible. I have seen so many estate sales

where the manuals just disappeared. So i found this booklet for the “Electro-Kit No. 1” by “Keane Associates”. This must be the same radio kit, as it uses the 1D8 valve and

does have a paper template.

The circuit is an odd one and i had to redraw it to my satisfaction, to understand it.

The top of the coil and the top of the tuning cap connect to triode grid.

The bottom of the tuning cap is grounded. The tube filament is grounded.

The bottom of the coil goes thru a 500 pF to ground.

So the 500pF and the tuning cap are in series across the coil. Their connection point together is ground.

The triode plate goes thru a 500pF cap to the bottom of the coil (which is 500pF above ground.)

So you have a Colpitts oscillator.
(gridleak R is from bottom of coil to ground (in parallel with the 500pF cap.)

So the thing is always in oscillating state. That’s odd and altho i have never tried to use the thing, i think it would be unusable for music listening, since you have to be

absolutely right on zero beat or the music sounds “off”. Tuning is direct drive of the cap, no vernier action.

Another odd thing is that as the variable tuning cap tunes thru its range, the feedback ratio in the tuned circuit has to change, from approx 1: 1.5 to 1: 20. Apparently

it still maintains oscillation over that range.
The booklet does say that if you have strong local stations to listen to, you can disconnect the feedback feed cap from triode plate (to the top of the other 500pF

cap.) Then it’s a straight grid leak detector circuit.

Clear as mud?

Another oddity is that the schematic lists tubes 1D8 or 3A8, but it doesn’t tell how to wire the filament pins for 1.5 volt operation of the 3A8.

Re the two-gang tuning cap with one section missing: i’m sure the kit company bought them this way. I’m sure i have seen the same thing used in some other kit,

maybe a Boy Scout radio kit.

Paul’s idea of adding a #30 audio stage is pretty neat. And also using shortwave coils – but i think you’d probably have to keep one hand glued to the tuning knob

to keep anything tuned in!

-Hue Miller

>Rummaging through the photos in this group, I came across three showing the "Artone Jr. #1" receiver, using a 1D8GT. This is the radio that I got me started in the hobby. However, the one I had, IIRC, had a paper template that was cemented to the plywood base to show the location of the various parts.I got a set of plug in coils, and morphed it into a short wave radio. I also built an audio amplifier with a #30 tube, circuit for "Boy's First Book of Radio" by Alfred P. Morgan, so that I could drive a small loud speaker. Anybody on the group ever build this radio, or know more about it? The interesting feature is using the grid leak R/C in the bottom of the coil, as the triode part (with the grid cap) is connected directly to the "hot" side of the tank coil and tuning capacitor. Mine also must have been made from surplus parts, as the tuning capacitor was a dual unit from a superhet receiver with the LO section removed.

IIRC, I got mine about 1949 or 1950.

73 /paul W3FIS

26941. RE: [regenrx] Artone Jr. #1

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-22 01:46:32 UTC
From: Hubert Miller
Topic: 26937 Message: 26941

Mike, thanks for clearing that up! I didn’t know about the Artone Jr. Using two 1T4 is the hard way to do it, and had to cost more.

The easier tuning on the strong locals – is that due to the pulling effect, locked oscillator effect?

-H

☐

Paul, You were probably looking at photos that I posted. There are two radios shown there. The one with the 1D8GT was sold as the Electrokit #1. It was also my first tube-radio that I built at Cub Scout age. This radio is somewhat unique among regens in that it uses the Colpitts circuit rather than the usual Armstrong or Hartley. Also, it has no regeneration control. You have to tune it to zero-beat on AM stations - easily done on strong locals, but very tricky on weak or distant ones. The schematic shown is for the Artone Jr. which uses two 1T4 tubes instead of the two sections of the 1D8GT. The circuits of both radios are the same and they were sold in the same size box with the same pictures on the box cover. Either one could be bought with the two-gang surplus tuning cap. or a conventional 1-gang tuning cap. shown on the cover and that did not necessisarily indicate what was actually in the box. Mike, W6MAB

_.-.'___

26943. are these called crimp connector

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-22 03:27:08 UTC
From: Rob
Topic: 26943 Message: 26943

In this picture there is a thermal fuse that has two brass crimped connectors instead of
solder :
http://www.learnmorsecode.com/laminator/slowmotor.jpg

What are they called.... how do I buy them... under what name?

26944. RE: [regenrx] Artone Jr. #1

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-22 03:36:41 UTC
From: Hubert Miller
Topic: 26937 Message: 26944

That’s why i was thinking the tuning was easier to tune in locals than distant weaker stations: the strong stations (might) tend to pull the oscillating detector and tending to lock

it to the carrier.
I kind of don’t understand the company’s logic in having it oscillate all the time. I suppose it made it a tiny bit easier to learn, as you wouldn’t have to learn how to peak a

regen control.
Do you remember on local stations it being stable enough to reasonably listen to music?

-H

>Hugh, I don't know much about "pulling effect". What I can tell you is that the Electrokit #1 had a serious hand capacity problem. This didn't show up on strong locals, but after tuning for zero-beat on weak or distant stations, you couldn't let go of the tuning knob without the set going back into oscillation. At the time we lived in northern New Jersey, and I could tune in all the New York City stations and listen for hours with no problem. However after tuning in, for example; WSM Nashville, WCCO Minneapolis, or XERA a Texas border station, I didn't dare move a muscle, let alone release my grip on the tuning knob, or the set would start squealing again. Mike, W6MAB

·–’–––

26945. Re: [regenrx] are these called crimp connector

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-22 03:44:29 UTC
From: Adrian Flynn
Topic: 26943 Message: 26945

i have always used needle nose pliers as a heat sink held tight with a
rubber band on the handle and then soldered the joint.

73
Adrian KF7DYU
Adrian, Mi.

Sent with MailTrack
<https://mailtrack.io/install?source=signature&lang=en&referral=adrianjamesflynn@...&idSignature=22>

On Sun, Aug 21, 2016 at 11:27 PM, Rob roomberg@... [regenrx] <
regenrx@yahoogroups.com> wrote:

>
>
> In this picture there is a thermal fuse that has two brass crimped
> connectors instead of
> solder :
> http://www.learnmorsecode.com/laminator/slowmotor.jpg
>
> What are they called.... how do I buy them... under what name?
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>
>

26946. Re: Artone Jr. #1

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-22 13:55:39 UTC
From: deadgoose@...
Topic: 26937 Message: 26946

IIRC, mine was easy to tune. I believe the antenna coil had a powdered iron core. No feedback, I think. I assumed it was an "infinite Z" detector, just depending on the grid-cathode rectification, and amplified by the triode itself. Later, I found out about grid lead detectors, and built some of those.

Slightly OT, but there is an interesting superhet in "Radio for the Millions," using a 1A7 and a 1D8GT.

Thanks for the answers!

If anybody comes up with more information, I'd appreciate it.

73 /paul W3FIS

26947. RE: [regenrx] are these called crimp connector

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-22 14:06:10 UTC
From: Larry
Topic: 26943 Message: 26947

As far as I know, it is a thermal fuse. As used in a heating appliance. If not in a heating appliance, just substitute with a slow blow of the anticipated voltage and current listed on your device.

Larry

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Sunday, August 21, 2016 11:27 PM
To: regenrx@yahoogroups.com; QRP-L Mailing List
Subject: [regenrx] are these called crimp connector

In this picture there is a thermal fuse that has two brass crimped connectors instead of solder :
http://www.learnmorsecode.com/laminator/slowmotor.jpg

What are they called.... how do I buy them... under what name?

26949. Re: [regenrx] are these called crimp connector

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-22 16:42:04 UTC
From: Rob
Topic: 26943 Message: 26949

YES YES YES its a thermal fuse..... readily available 13 cent thermal fuse.

but NO
the question is what are the crimp connectors called when you try to buy them....

AND THE ANSWER IS:
high temperature crimp (or butt) connector

used in heating appliances to HOLD the THERMAL FUSE leads together with feed wires because
the wires get hot enough to melt solder.

AND
the wires and crimps and fuse gets covered with a fiberglass fireproof sleave.

On 08/22/2016 10:06 AM, 'Larry' lbeaty@... [regenrx] wrote:
>
> As far as I know, it is a thermal fuse. As used in a heating
> appliance. If not in a heating appliance, just substitute with a
> slow blow of the anticipated voltage and current listed on your device.
>
> Larry
>
> *From:*regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
> *Sent:* Sunday, August 21, 2016 11:27 PM
> *To:* regenrx@yahoogroups.com; QRP-L Mailing List
> *Subject:* [regenrx] are these called crimp connector
>
> In this picture there is a thermal fuse that has two brass crimped
> connectors instead of
> solder :
> http://www.learnmorsecode.com/laminator/slowmotor.jpg
>
> What are they called.... how do I buy them... under what name?
>
>

26950. Re: [regenrx] FETs

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-23 13:56:56 UTC
From: d29602960@...
Topic: 26852 Message: 26950

Hi again,

Just a few lines to say thanks to all who responded (both on this group and directly) to my request for information about linear FET AGC control action.

The subject is now much better understood.

73,s to all.

Des (M0AYF)

26951. toner laminator melted nylon gear

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-24 08:25:09 UTC
From: Rob
Topic: 26951 Message: 26951

PCB toner transfer taget temperature was 340 degrees.
Pictures of the experiment here:
http://www.learnmorsecode.com/laminator/index.html

Two power switches ... one for the motor and one for the heater
control circuit.

Original laminator temp topped out at 280 degrees Fahrenheit.

Temperature increase to 370 degrees was achieved by adding
a 1K resistor inline with the thermistor... but it kept climbing
to 380 degrees so I terminated the heater power supply line.

Playing with resistors

http://www.learnmorsecode.com/laminator/royalmods4.jpg

found that 22 ohms made 320 degrees Fahrenheit

http://www.learnmorsecode.com/laminator/royalmods6.jpg

and 51 ohms made 354 degrees so that was pretty much a declaration of
circuit wizard victory
when the temperature stopped climbing and hovered between 348 and 355
degrees.
So I grabbed a circuit board and a toner transfer image and fed it into
the hot slot but it did not grab the board at all.....
http://www.learnmorsecode.com/laminator/royalmods7.jpg
because the rollers stopped spinning:
http://www.learnmorsecode.com/laminator/royalmods9.jpg

well... .. like I said... no surprise there.

The end of the roller where the metal axles protrude ..... the metal
was 300 degrees.

Does anyone have a source for these gears made out of metal?

26952. Re: toner laminator melted nylon gear

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-24 10:23:12 UTC
From: Brad Fayette
Topic: 26951 Message: 26952

These guys claim to have a lot of gears:

http://www.surplusshed.com/

--
Regards,

Brad Fayette
"Blessed are the geeks, for they shall inherit the earth."

26953. hotcakes stove top PCB toner transfer

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-27 03:26:01 UTC
From: Rob
Topic: 26953 Message: 26953

Waiting for metal gears to replace the melted plastic gears......
found a stove top PCB toner transfer method... had to play:

http://www.learnmorsecode.com/laminator/hotcakes.html

Gonna need to get me a plasma cutter.

26954. what pre amplifier am I missing for the 716 regen project

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-29 06:59:48 UTC
From: Rob
Topic: 26954 Message: 26954

What pre amplifier am I missing for the 716 regen project?

The receiver circuit works fine.... when I plug it into a store bought
HONEYTONE guitar
amplifer
http://www.learnmorsecode.com/716/etch/0703.jpg

BUT
most other ampifiers make headphone audio... barely desk top audio:

http://www.learnmorsecode.com/716/lm386.html
http://www.learnmorsecode.com/amp/tl431PCBdone1.jpg
http://www.learnmorsecode.com/amp/tl431VU2PPP09.jpg
http://www.learnmorsecode.com/amp/tl431.html
It took weeks to get barely a peep out of the TDA7052 IC
and I got whisper quiet CW out of a TDA2030

Latest experiment was
http://www.learnmorsecode.com/amp/SM7UCZamp2.jpg
http://www.learnmorsecode.com/laminator/hotcakes9b.jpg
which is dead silent.

ALL of these experimental amplifiers come to life when I
plug them into a signal generator or an IPOD music player.

So what am I missing here.....
that the HONEYTONE guitar amplifier has in it?

http://www.learnmorsecode.com/amp/honeyrule.jpg
The TWO TL072 pre-amp circuits?

26955. Re: [regenrx] what pre amplifier am I missing for the 716 regen project

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-29 07:06:14 UTC
From: J Ed
Topic: 26954 Message: 26955

A guitar amplifier has higher gain than a line-level amplifier. CW from a receiver may be very low so you may need more gain than you can get from some amplifiers. Try adding 20dB (10x voltage) of gain at the end of the receiver.

Ed AE7TE

On Sun, Aug 28, 2016 at 11:59 PM, Rob roomberg@... [regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> What pre amplifier am I missing for the 716 regen project?
>
> The receiver circuit works fine.... when I plug it into a store bought
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> http://www.learnmorsecode.com/716/etch/0703.jpg
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26956. Re: [regenrx] what pre amplifier am I missing for the 716 regen project

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-29 07:11:06 UTC
From: Rob
Topic: 26954 Message: 26956

Can you recommend the circuit to add that does 20dB (10x voltage) of
gain at the end of the receiver?

On 08/29/2016 03:06 AM, J Ed jedwardsat1@... [regenrx] wrote:
> A guitar amplifier has higher gain than a line-level amplifier. CW
> from a receiver may be very low so you may need more gain than you can
> get from some amplifiers. Try adding 20dB (10x voltage) of gain at the
> end of the receiver.
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> <mailto:regenrx@yahoogroups.com>> wrote:
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> most other ampifiers make headphone audio... barely desk top audio:
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26957. Re: [regenrx] what pre amplifier am I missing for the 716 regen project

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-29 07:31:53 UTC
From: J Ed
Topic: 26954 Message: 26957

I'd personally recommend a TL071 wired for Av = 10. Use a capacitor around the feedback resistor to lower the gain at high frequencies. If you're trying to find amateur radio signals only, make the roll off around 2.5 KHz. The signal level will still be high enough at 3 KHz that you won't notice much reduction.

You could also make a one-transistor gain stage. It's easy enough to make one with a gain around 10. 2N3904 or equivalent should be enough. You'd get more predictable results with the op-amp unless you're dedicated to a discrete component design.

I don't know what the circuit of the regen you're building looks like but it sounds like low gain is your problem. Are you having to turn the gain of the honeytone amplifier up high?

Ed AE7TE

On Mon, Aug 29, 2016 at 12:11 AM, Rob roomberg@... [regenrx] <
regenrx@yahoogroups.com> wrote:

>
>
> Can you recommend the circuit to add that does 20dB (10x voltage) of gain
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> receiver.
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> On Sun, Aug 28, 2016 at 11:59 PM, Rob roomberg@ptd.net [regenrx] <
> regenrx@yahoogroups.com> wrote:
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>> The TWO TL072 pre-amp circuits?
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26958. Re: [regenrx] what pre amplifier am I missing for the 716 regen project

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-29 14:30:54 UTC
From: Rob
Topic: 26954 Message: 26958

All those pictures..... and I missed putting the circuit at the top of
the question.
Sorry about that.....
schmatic here:
http://www.learnmorsecode.com/716/VK3YEmodKB3BYTv2.jpg
details here:
http://www.learnmorsecode.com/716/716.html

PCB here
http://www.learnmorsecode.com/716/etch/index.html

I am not opposoed to op-amps as much as I was hoping to use discrete
components
as much as possible.

Yes.... I had to turn the honeytone gain way up high.

On 08/29/2016 03:31 AM, J Ed jedwardsat1@... [regenrx] wrote:
> I'd personally recommend a TL071 wired for Av = 10. Use a capacitor
> around the feedback resistor to lower the gain at high frequencies. If
> you're trying to find amateur radio signals only, make the roll off
> around 2.5 KHz. The signal level will still be high enough at 3 KHz
> that you won't notice much reduction.
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> You could also make a one-transistor gain stage. It's easy enough to
> make one with a gain around 10. 2N3904 or equivalent should be enough.
> You'd get more predictable results with the op-amp unless you're
> dedicated to a discrete component design.
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> On Mon, Aug 29, 2016 at 12:11 AM, Rob roomberg@...
> <mailto:roomberg@...> [regenrx] <regenrx@yahoogroups.com
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> of gain at the end of the receiver?
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> On 08/29/2016 03:06 AM, J Ed jedwardsat1@...
> <mailto:jedwardsat1@...> [regenrx] wrote:

>> A guitar amplifier has higher gain than a line-level amplifier.
>> CW from a receiver may be very low so you may need more gain than
>> you can get from some amplifiers. Try adding 20dB (10x voltage)
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>> BUT
>> most other ampifiers make headphone audio... barely desk top
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>> The TWO TL072 pre-amp circuits?

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>>
>>

26959. Re: [regenrx] what pre amplifier am I missing for the 716 regen project

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-29 15:55:51 UTC
From: J Ed
Topic: 26954 Message: 26959

Look at rod elliott's audio Web site for circuits. He has on there circuits
that will suit you...and they're discrete components.

Ed AE7TE

On Aug 29, 2016 7:30 AM, "Rob roomberg@... [regenrx]" <
regenrx@yahoogroups.com> wrote:

>
>
> All those pictures..... and I missed putting the circuit at the top of
> the question.
> Sorry about that.....
> schmatic here:
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> details here:
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> PCB here
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> I am not opposoed to op-amps as much as I was hoping to use discrete
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> Yes.... I had to turn the honeytone gain way up high.
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> On 08/29/2016 03:31 AM, J Ed jedwardsat1@... [regenrx] wrote:
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> I'd personally recommend a TL071 wired for Av = 10. Use a capacitor around
> the feedback resistor to lower the gain at high frequencies. If you're
> trying to find amateur radio signals only, make the roll off around 2.5
> KHz. The signal level will still be high enough at 3 KHz that you won't
> notice much reduction.
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> You could also make a one-transistor gain stage. It's easy enough to make
> one with a gain around 10. 2N3904 or equivalent should be enough. You'd get
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> it sounds like low gain is your problem. Are you having to turn the gain of
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> On Mon, Aug 29, 2016 at 12:11 AM, Rob roomberg@... [regenrx] <
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26960. Re: [regenrx] what pre amplifier am I missing for the 716 regen project

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-29 16:06:36 UTC
From: Rob
Topic: 26954 Message: 26960

Could you be just a little more specific?

rod elliott google out to tons of web pages.

I landed on a hundred circuits here:
http://sound.westhost.com/projects-0.htm#pre

What did you have in mind from Rod Elliott?
Have you built any of his circuits?

On 08/29/2016 11:55 AM, J Ed jedwardsat1@... [regenrx] wrote:
>
> Look at rod elliott's audio Web site for circuits. He has on there
> circuits that will suit you...and they're discrete components.
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>> voltage) of gain at the end of the receiver?
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>>> On Sun, Aug 28, 2016 at 11:59 PM, Rob roomberg@...
>>> <mailto:roomberg@...> [regenrx] <regenrx@yahoogroups.com
>>> <mailto:regenrx@yahoogroups.com>> wrote:
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>>> What pre amplifier am I missing for the 716 regen project?
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>>> The receiver circuit works fine.... when I plug it into
>>> a store bought HONEYTONE guitar
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>>> http://www.learnmorsecode.com/716/etch/0703.jpg
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>>> BUT
>>> most other ampifiers make headphone audio... barely desk
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>>> ALL of these experimental amplifiers come to life when I
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>>> So what am I missing here.....
>>> that the HONEYTONE guitar amplifier has in it?
>>>
>>> http://www.learnmorsecode.com/amp/honeyrule.jpg
>>> The TWO TL072 pre-amp circuits?
>>>
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26961. Re: [regenrx] what pre amplifier am I missing for the 716 regen project

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-29 16:41:29 UTC
From: J Ed
Topic: 26954 Message: 26961

http://sound.westhost.com/no-opamps.htm

Read this. The two transistor feedback pair should be what you're looking
for.

Ed AE7TE

On Aug 29, 2016 9:06 AM, "Rob roomberg@... [regenrx]" <
regenrx@yahoogroups.com> wrote:

>
>
> Could you be just a little more specific?
>
> rod elliott google out to tons of web pages.
>
> I landed on a hundred circuits here:
> http://sound.westhost.com/projects-0.htm#pre
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> What did you have in mind from Rod Elliott?
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> On 08/29/2016 11:55 AM, J Ed jedwardsat1@... [regenrx] wrote:
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> Look at rod elliott's audio Web site for circuits. He has on there
> circuits that will suit you...and they're discrete components.
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>> All those pictures....... and I missed putting the circuit at the top of
>> the question.
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>> http://www.learnmorsecode.com/716/VK3YEmodKB3BYTv2.jpg
>> details here:

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>> I am not opposoed to op-amps as much as I was hoping to use discrete
>> components
>> as much as possible.
>>
>> Yes.... I had to turn the honeytone gain way up high.
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>> I'd personally recommend a TL071 wired for Av = 10. Use a capacitor
>> around the feedback resistor to lower the gain at high frequencies. If
>> you're trying to find amateur radio signals only, make the roll off around
>> 2.5 KHz. The signal level will still be high enough at 3 KHz that you won't
>> notice much reduction.
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>> You could also make a one-transistor gain stage. It's easy enough to make
>> one with a gain around 10. 2N3904 or equivalent should be enough. You'd get
>> more predictable results with the op-amp unless you're dedicated to a
>> discrete component design.
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>>>> http://www.learnmorsecode.com/amp/honeyrule.jpg
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26962. Re: [regenrx] what pre amplifier am I missing for the 716 regen project 18 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-29 17:06:58 UTC
From: Rob
Topic: 26954 Message: 26962

thank you
Very nice details..... will take a while to read it all.

Of course supply voltage says +18 volts

I was hoping to figure out a 9 volt battery solution.

On 08/29/2016 12:41 PM, J Ed jedwardsat1@... [regenrx] wrote:
>
> http://sound.westhost.com/no-opamps.htm
>
> Read this. The two transistor feedback pair should be what you're
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>
> Ed AE7TE
>
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>>> enough to make one with a gain around 10. 2N3904 or
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26963. Re: [regenrx] what pre amplifier am I missing for the 716 regen project

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-29 17:06:31 UTC
From: Theosleaper
Topic: 26954 Message: 26963

Make sure the audio amplifier has a high impedance so that it does not
load down the signal.
10,000 ohms times 20 = 200,000 ohms. Or maybe make the first audio stage
a follower circuit.
Rick, K1WYH

On 8/29/2016 12:41 PM, J Ed jedwardsat1@... [regenrx] wrote:
>
> http://sound.westhost.com/no-opamps.htm
>
> Read this. The two transistor feedback pair should be what you're
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>
> Ed AE7TE
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26964. Re: [regenrx] what pre amplifier am I missing for the 716 regen project 18 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-29 17:11:47 UTC
From: J Ed
Topic: 26954 Message: 26964

Most of those will work with 9v. The point is that the signals you are amplifying are less than a millivolt, so the useful output range of these amplifiers is much higher than what the output would be amplifying a higher voltage.

Ed AE7TE

On Aug 29, 2016 10:07 AM, "Rob roomberg@... [regenrx]" <
regenrx@yahoogroups.com> wrote:

>
>
> thank you
> Very nice details..... will take a while to read it all.
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> Of course supply voltage says +18 volts
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> I was hoping to figure out a 9 volt battery solution.
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26965. Re: [regenrx] what pre amplifier am I missing for the 716 regen project

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-29 23:43:47 UTC
From: Rob
Topic: 26954 Message: 26965

HOW do I
Make sure the audio amplifier has a high impedance so that it does not
load down the signal.
WITH WHAT CIRCUIT?

On 08/29/2016 01:06 PM, Theosleaper theosleaper@... [regenrx] wrote:
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> Make sure the audio amplifier has a high impedance so that it does not
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> 10,000 ohms times 20 = 200,000 ohms. Or maybe make the first audio
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26966. Re: [regenrx] what pre amplifier am I missing for the 716 regen project

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-29 23:55:04 UTC
From: J Ed
Topic: 26954 Message: 26966

The circuit isn't as important to a high input impedance as is the values
in the circuit.

Simple: use a JFET (MPF102, J201, or similar) to serve as a buffer to the
preamp. Use a 1M resistor from the gate to ground. Figure out what biases
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Ed AE7TE

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> Read this. The two transistor feedback pair should be what you're looking
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>> Could you be just a little more specific?
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26967. Re: [regenrx] what pre amplifier am I missing for the 716 regen project

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-30 00:05:22 UTC
From: Rob
Topic: 26954 Message: 26967

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http://www.learnmorsecode.com/amp/jfet_preamp.jpg

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26968. Re: [regenrx] what pre amplifier am I missing for the 716 regen project

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-30 00:10:48 UTC
From: J Ed
Topic: 26954 Message: 26968

That'll work. A J201 will have higher gain. You'll need to tweak the resistor values because they have less current than MPF102. Since the signals you will see are very small, you could replace the series 5.1v diodes (which would clip signals higher than 5.7v) with parallel 1N914 diodes (or similar). When I say parallel, that means one with the cathode to ground and one with the anode to ground. This will remove high-amplitude noise pulses that will otherwise overload the amplifier and probably hurt your ears.

Ed AE7TE

On Mon, Aug 29, 2016 at 5:05 PM, Rob roomberg@... [regenrx] <regenrx@yahoogroups.com> wrote:

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>>>>>> http://www.learnmorsecode.com/amp/honeyrule.jpg
>>>>>> The TWO TL072 pre-amp circuits?
>>>>>>
>>>>>>
>>>>>> <http://www.learnmorsecode.com/> <http://www.learnmorsecode.com/>
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>>>>> <roomberg@...>
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>>>>> <roomberg@...>
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>>>> <regenrx@yahoogroups.com> <roomberg@...>
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>>> <regenrx@yahoogroups.com> <roomberg@...>
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26969. Re: [regenrx] what pre amplifier am I missing for the 716 regen project

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-30 05:33:10 UTC
From: Rob
Topic: 26954 Message: 26969

thank you

I recall that the purpose of the 5.1 zeners was strictly as a protection
from static electricity.
I think the circuit was designed as a microphone or electric guitar pre-amp
which carries a zillian volts static jolt every time you plug your
guitar into it.
So it makes sense to do the 1N914 clipping filter.

I was also considering this dual mpf102 pre-amp:
http://www.learnmorsecode.com/amp/mpf102B1.gif

On 08/29/2016 08:10 PM, J Ed jedwardsat1@... [regenrx] wrote:
> That'll work. A J201 will have higher gain. You'll need to tweak the
> resistor values because they have less current than MPF102. Since the
> signals you will see are very small, you could replace the series 5.1v
> diodes (which would clip signals higher than 5.7v) with parallel 1N914
> diodes (or similar). When I say parallel, that means one with the
> cathode to ground and one with the anode to ground. This will remove
> high-amplitude noise pulses that will otherwise overload the amplifier
> and probably hurt your ears.
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> Ed AE7TE
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> On Mon, Aug 29, 2016 at 5:05 PM, Rob roomberg@...
> <mailto:roomberg@...> [regenrx] <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>> wrote:
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> I found this on the web a while ago:
> http://www.learnmorsecode.com/amp/jfet_preamp.jpg
> <http://www.learnmorsecode.com/amp/jfet_preamp.jpg>
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>> the values in the circuit.
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>> Simple: use a JFET (MPF102, J201, or similar) to serve as a
>> buffer to the preamp. Use a 1M resistor from the gate to ground.
>> Figure out what biases the current in the FET between IDSS and
>> pinch-off, then bias it roughly halfway. Use a drain resistor
>> that drops about 1/2 VCC at the current. Use that to feed the
>> input of your preamp.

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>> Ed AE7TE
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>> On Mon, Aug 29, 2016 at 4:43 PM, Rob roomberg@...
>> <mailto:roomberg@...> [regenrx] <regenrx@yahoogroups.com
>> <mailto:regenrx@yahoogroups.com>> wrote:
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>> HOW do I
>> Make sure the audio amplifier has a high impedance so that it
>> does not load down the signal.
>> WITH WHAT CIRCUIT?
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>> On 08/29/2016 01:06 PM, Theosleaper theosleaper@...
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>>> Make sure the audio amplifier has a high impedance so that
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>>> 10,000 ohms times 20 = 200,000 ohms. Or maybe make the first
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>>> On 8/29/2016 12:41 PM, J Ed jedwardsat1@...
>>> <mailto:jedwardsat1@gmail.com> [regenrx] wrote:
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>>>> http://sound.westhost.com/no-opamps.htm
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>>>> Read this. The two transistor feedback pair should be what
>>>> you're looking for.
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>>>> On Aug 29, 2016 9:06 AM, "Rob roomberg@...
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>>>> <regenrx@...m <mailto:regenrx@yahoogroups.com>>
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>>>> Could you be just a little more specific?
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>>>> rod elliott google out to tons of web pages.
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>>>> I landed on a hundred circuits here:
>>>> http://sound.westhost.com/projects-0.htm#pre
>>>>
>>>> What did you have in mind from Rod Elliott?

>>>> Have you built any of his circuits?
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>>>>> Ed AE7TE
>>>>>
>>>>>
>>>>> On Aug 29, 2016 7:30 AM, "Rob roomberg@...
>>>>> <mailto:roomberg@...> [regenrx]"
>>>>> <regenrx@yahoogroups.com
>>>>> <mailto:regenrx@yahoogroups.com>> wrote:
>>>>>
>>>>> All those pictures..... and I missed putting the
>>>>> circuit at the top of the question.
>>>>> Sorry about that.....
>>>>> schmatic here:
>>>>> http://www.learnmorsecode.com/716/VK3YEmodKB3BYTv2.jpg
>>>>> details here:
>>>>> http://www.learnmorsecode.com/716/716.html
>>>>>
>>>>> PCB here
>>>>> http://www.learnmorsecode.com/716/etch/index.html
>>>>>
>>>>> I am not opposoed to op-amps as much as I was
>>>>> hoping to use discrete components
>>>>> as much as possible.
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>>>>> Yes.... I had to turn the honeytone gain way up high.
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>>>>> On 08/29/2016 03:31 AM, J Ed jedwardsat1@...
>>>>> <mailto:jedwardsat1@...> [regenrx] wrote:
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>>>>>> I'd personally recommend a TL071 wired for Av =
>>>>>> 10. Use a capacitor around the feedback resistor
>>>>>> to lower the gain at high frequencies. If you're
>>>>>> trying to find amateur radio signals only, make
>>>>>> the roll off around 2.5 KHz. The signal level
>>>>>> will still be high enough at 3 KHz that you won't
>>>>>> notice much reduction.
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>>>>>> You could also make a one-transistor gain stage.

>>>>>> It's easy enough to make one with a gain around
>>>>>> 10. 2N3904 or equivalent should be enough. You'd
>>>>>> get more predictable results with the op-amp
>>>>>> unless you're dedicated to a discrete component
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>>>>>> [regenrx] <regenrx@yahoogroups.com
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>>>>>>> you can get from some amplifiers. Try adding
>>>>>>> 20dB (10x voltage) of gain at the end of the
>>>>>>> receiver.
>>>>>>>
>>>>>>> Ed AE7TE
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>>>>>>> On Sun, Aug 28, 2016 at 11:59 PM, Rob
>>>>>>> roomberg@ptd.net <mailto:roomberg@...>
>>>>>>> [regenrx] <regenrx@yahoogroups.com
>>>>>>> <mailto:regenrx@yahoogroups.com>> wrote:
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>>>>>>> What pre amplifier am I missing for the
>>>>>>> 716 regen project?
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>>>>>>> The receiver circuit works fine.... when
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>>>>>>> guitar
>>>>>>> amplifer
>>>>>>> http://www.learnmorsecode.com/716/etch/0703.jpg
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>>>>>>> BUT
>>>>>>> most other ampifiers make headphone
>>>>>>> audio... barely desk top audio:
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>>>>>>> http://www.learnmorsecode.com/716/lm386.html
>>>>>>> http://www.learnmorsecode.com/amp/tl431PCBdone1.jpg
>>>>>>> http://www.learnmorsecode.com/amp/tl431VU2PPP09.jpg
>>>>>>> http://www.learnmorsecode.com/amp/tl431.html
>>>>>>> It took weeks to get barely a peep out
>>>>>>> of the TDA7052 IC
>>>>>>> and I got whisper quiet CW out of a TDA2030
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>>>>>>> which is dead silent.
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>>>>>>> ALL of these experimental amplifiers
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>>>>>>> IPOD music player.
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26970. Re: [regenrx] what pre amplifier am I missing for the 716 regen project

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-30 06:28:21 UTC
From: J Ed
Topic: 26954 Message: 26970

My experience has taught me two things about the MPF102...

- They have low gain at 9-12v, for audio amplifiers. I find they are more useful for RF.

- Simulation models of them are useless. The ones that are floating around there are not helpful in predicting JFET performance.

So here is what I did. I had a large bag of MPF102s sitting in my parts bin. I took 15 of them and ran a test, where I grounded the gate, hooked the drain to 12v, and placed the source to ground through a series of resistors.

The first one was 1 ohm, which allowed me to find IDSS, which is the max current the drain will conduct with 0v between the gate and source. Then I used a 100k ohm resistor to find the pinch off voltage. This is the voltage from gate to source where negligible current flows. Then I chose three resistors in the range that would give me good midpoint values. With that data, I could make a curve that showed a rough estimation of how the FET would work.

Use J201s or similar for audio gain. Look at www.runoffgroove.com. They use JFETs, mainly the J201, to make guitar booster and effects that simulate tube amps. You could find a good deal of help there. I'd recommend a 40 dB preamp with a gain control so you'd have more gain than needed.

The diodes 1N914 or 1N4148 will do roughly the same thing as the zener for large signals. For small ones, they will be almost transparent. Almost. If you put two series diodes in the circuit, you could get improved distortion when receiving multiple signals.

Ed AE7TE

On Aug 29, 2016 10:33 PM, "Rob roomberg@... [regenrx]" <
regenrx@yahoogroups.com> wrote:

>
>
> thank you
>
> I recall that the purpose of the 5.1 zeners was strictly as a protection
> from static electricity.
> I think the circuit was designed as a microphone or electric guitar pre-amp
> which carries a zillian volts static jolt every time you plug your guitar
> into it.
> So it makes sense to do the 1N914 clipping filter.
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> I was also considering this dual mpf102 pre-amp:
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> diodes (which would clip signals higher than 5.7v) with parallel 1N914
> diodes (or similar). When I say parallel, that means one with the cathode
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>> I found this on the web a while ago:
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>> preamp. Use a 1M resistor from the gate to ground. Figure out what biases
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>>>>> of the question.
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>>>>> http://www.learnmorsecode.com/716/VK3YEmodKB3BYTv2.jpg
>>>>> details here:
>>>>> http://www.learnmorsecode.com/716/716.html
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>>>>> http://www.learnmorsecode.com/716/etch/index.html
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>>>>> I'd personally recommend a TL071 wired for Av = 10. Use a capacitor
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>>>>> you're trying to find amateur radio signals only, make the roll off around
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>>>>> You'd get more predictable results with the op-amp unless you're dedicated
>>>>> to a discrete component design.
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>>>>>>> most other ampifiers make headphone audio... barely desk top audio:
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26971. 716 regen project, et al audio amplification

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-30 11:14:20 UTC
From: kf8zn@...
Topic: 26954 Message: 26971

Rob,

How many ways do you intend to skin this cat?

I showed you how to get 74db gain from an LM386, which you stated had worked.

http://www.intio.or.jp/jf10zl/LM386.htm http://www.intio.or.jp/jf10zl/LM386.htm

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http://www.intio.or.jp/jf10zl/LM386.htm http://www.intio.or.jp/jf10zl/LM386.htm 7.How to get 74dB by LM386 lm386.gif LM386 is very popular IC also in Japan. It is used in Radio receiver. The power of it (500mW) is enough for the personal use...

View on www.intio.or.jp http://www.intio.or.jp/jf10zl/LM386.htm
Preview by Yahoo

This darlington circuit works well also, offering VERY high input impedance, and GOBS of gain.

MPF102 FET Preamplifier FAQs, Part 7: Other Preamplifier Circuits
http://www.hawestv.com/mtv_faq/faq_fetpreamp7.htm

http://www.hawestv.com/mtv_faq/faq_fetpreamp7.htm

MPF102 FET Preamplifier FAQs, Part 7: Other Preampl...
http://www.hawestv.com/mtv_faq/faq_fetpreamp7.htm Questions about guitar & voice analog interfaces for Arduino microcontroller systems. Superior tone from simple, homemade circuits with JFETs, transis...

View on www.hawestv.com http://www.hawestv.com/mtv_faq/faq_fetpreamp7.htm
Preview by Yahoo

26972. Re: [regenrx] 716 regen project, et al audio amplification and cat skinnings

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-30 14:54:22 UTC
From: Rob
Topic: 26954 Message: 26972

I did not get room filling audio with the JF10ZL LM386 circuit.
I got just barely enough headphone level audio out of a 3 inch 8 ohm
speaker.

The goal here is to find a good audio output circuit to mate with the
716 regen project circuit
that can be repeatable cheap with the newbies, kids and scouts.

Preferably discrete components but I am game for anything....
considering that a TDA2030 kit now costs $1.69 from
EBAY. Noting that TDA2030 could be used with a kids regen project and a
kid could also play an electric guitar through that TDA2030 kit I
doubt it would ever be tossed in the trash.

The internet is chock full of examples using transistors and various ICs
like TL741 and MPF102 and all levels of TDA2030 etc...

I wanted to compare the results of actually building these circuits and
then in the future be able to pick an amplifier
any time to add to radio experiment circuits. I had in the past used
LM386 with very mixed results.

BUT
the 716 regen circuit does not play well with these amplifiers for
me..... so it raised the question of
what to add in between 716 and the amplifier circuit.... and the issue
of how to make the audio amplifier
circuit have a high impedance so that it does not load down the signal
has become the current
design phase.

On 08/30/2016 07:14 AM, kf8zn@... [regenrx] wrote:
>
> Rob,
>
> How many ways do you intend to skin this cat?
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> I showed you how to get 74db gain from an LM386, which you stated had
> worked.
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> image <http://www.intio.or.jp/jf10zl/LM386.htm>
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> http://www.intio.or.jp/jf10zl/LM386.htm
> 7.How to get 74dB by LM386 lm386.gif LM386 is very popular IC also in
> Japan. It is used in Radio receiver. The power of it (500mW) is enough
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> < tr class="link-enhancr-element">
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26973. Re: [regenrx] 716 regen project, et al audio amplification 2N6426

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-30 15:12:46 UTC
From: Rob
Topic: 26954 Message: 26973

I had not played with darlington pre-amps yet.
Is that some radio designer high impedance secret I need to learn?

On 08/30/2016 07:14 AM, kf8zn@... [regenrx] wrote:
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> Rob,
>
> How many ways do you intend to skin this cat?
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> I showed you how to get 74db gain from an LM386, which you stated had
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> Preview by Yahoo
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26974. Crystals

Yahoo group: regenrx (2016 — 2017)
Date: 2016-08-31 20:06:02 UTC
From: Leonard Meek
Topic: 26974 Message: 26974

I think I've been pretty naive about crystals. I've had trouble getting my R'dynes to work dependably, and it seems to be the fault of my crystals. I have a couple hundred, mostly HC-6 and FT-243. I've always believed the marked frequency as gosphel, but while diddling with my Mk.26 I noticed some inconsistancies. Crystals marked with the same frequency behaved differentl, so I threw together a little crystal tester. Many of the crystals I was using were nowhere near the freq stamped on the case. I checked them against the pattern on my scope to verify the results. Most were within a couple of Hz, but some were way less, and others were totally dead. Someone posted a blurb here a while back on checking crystals, but I don't remember who. I don't understand all I know so I need a tutorial on crystals. I'm going to have to test them all before I mess with my R'dynes any more.

Leonard

26975. Re: [regenrx] Crystals

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-01 00:35:01 UTC
From: Bill Cromwell
Topic: 26974 Message: 26975

Hi Leonard,

I tested my crystals with my Knight T-60 transmitter and dummy load with a frequency counter loose coupled to the dummy load. Some of them - as you have said - are close enough for amateur work and some are far, far off. A few are dead. The Knight T-60 is not required. Any old mopa style TX with or without a couple of extra stages will do the job. A frequency counter isn't needed either. A receiver that can tune the crystal's frequency is just as good. If the crystal is far off the receiver might be clumsy to use. If it's dead there will no power output - not even a little. My old transmitters all use the FT-243 but adapters are easy enough to build for testing other form factors. Those old TXs will sing way outside of the ham bands if you plug in out-of-band xtals. At least mine will. The bandswitch might say 40 meters but the transmitter doesn't really *know*.

73,

Bill KU8H

On 08/31/2016 04:06 PM, 'Leonard Meek' lemeek@... [regenrx] wrote:
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> R'dynes to work dependably, and it seems to be the fault of my crystals. I
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bark less - wag more

26976. Re: [regenrx] Crystals

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-01 01:30:07 UTC
From: Leonard Meek
Topic: 26974 Message: 26976

Thanks, Bill. I don't have a xmtr I can use for testing. I built a little Colpitts oscillator that worked quite well with my counter for crystals <10MHz. I can also make a rough estimate with my scope by taking the reciprocal of the time between positive peaks. It's time consuming and not as accurate as the counter, but at least I'll know which ballpark I'm in.

Leonard

----- Original Message -----
From: "Bill Cromwell wrcromwell@... [regenrx]"
<regenrx@yahoogroups.com>
To: <regenrx@yahoogroups.com>
Sent: Wednesday, August 31, 2016 2:35 PM
Subject: Re: [regenrx] Crystals

> Hi Leonard,
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> a frequency counter loose coupled to the dummy load. Some of them - as
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26977. Re: [regenrx] Crystals

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-01 01:48:55 UTC
From: Tom Lee
Topic: 26974 Message: 26977

I would be very surprised to hear that the HC6-packaged crystals were grossly out of tolerance, unless they started off that way or were physically damaged (including a loss of seal). But vintage FT243-packaged crystals were/are unstable because etching to passivate the surfaces had not yet been implemented or mastered. The usual symptom is an increase in frequency, accompanied by a decrease in activity, over time. Eventually many of these units simply stop oscillating altogether. These can be revived with a little etching (or even a pencil mark in the right place), but getting them back on frequency, and keeping them there, is not trivial.

Another failure mode was simple corrosion of the metal electrodes pressed against the crystal's faces. If your crystals have been stored in a damp environment, that can be a problem, particularly with early production units that used brass.

--Cheers,
Tom

--
Prof. Thomas H. Lee
Allen Bldg., CIS-205
420 Via Palou Mall
Stanford University
Stanford, CA 94305-4070
http://www-smirc.stanford.edu
650-725-3383 fax

On 8/31/2016 5:35 PM, Bill Cromwell wrcromwell@... [regenrx] wrote:
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26978. Re: [regenrx] Crystals

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-01 01:58:52 UTC
From: Phil
Topic: 26974 Message: 26978

The "Chi-Com" (Sinometer VC2000) I bought a couple years ago has an Xtal check function that I found to be very handy. Not sure of the circuit used (other than that it's solid state ;-) but you plug the xtal in (if it has leads or if the Xtal doesn't, I have a pair of very short leads with small gator clips I use.

I found that 'overtone' xtals measure the fundamental. Hey, it's not optimized for some of the old transmitting xtals (think it's more for modern ones), but it gets you in the ballpark, especially if you don't know anything about the xtal to begin with..

73 From "The Beaconeer's Lair"
Specializing in DXing NDBs (Longwave Beacons)
Phil, KO6BB, http://www.qsl.net/ko6bb/

HF/LF RADIOS:
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
Icom: IC-735 Transceiver, 500Hz CW filter (~1990).
Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
Icom: IC-7200 Xceiver, DSP IF & filters (~2015).
Kenwood: TS-450SAT Xceiver, cascaded 250/125Hz Inrad filters.
SDR: Softrock Ensemble II LF (built from a kit 2015).

ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 4 Port Antenna Multicoupler, Feeds 4 RX's.
AF Filters: Timewave DSP-599zx & HOMEBREW 8 Hz Filter.

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

On 9/1/2016 1:30 AM, 'Leonard Meek' lemeek@... [regenrx] wrote:
> Thanks, Bill. I don't have a xmtr I can use for testing. I built a little
> Colpitts oscillator that worked quite well with my counter for crystals
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26979. Re: [regenrx] Crystals

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-01 05:01:57 UTC
From: Leonard Meek
Topic: 26974 Message: 26979

I think I accumulated these crystals when I was in the Navy back in the '50's. They were definitely in a wet environment. Out of nearly 100 FT-243 crystals, about a dozen were anywhere near the freq stamped on the case. The rest were all somewhere between 4 to 6 MHz, even though they were marked 13 to 17 MHz. I found 1 good one at 15 MHz, which made my Mk.26 start working like it should.

Leonard

----- Original Message -----
From: "Tom Lee tomlee@... [regenrx]" <regenrx@yahoogroups.com>
To: <regenrx@yahoogroups.com>
Sent: Wednesday, August 31, 2016 3:48 PM
Subject: Re: [regenrx] Crystals

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> grossly out of tolerance, unless they started off that way or were
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> production units that used brass.
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> Prof. Thomas H. Lee
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26980. Re: [regenrx] Crystals

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-01 05:05:59 UTC
From: Leonard Meek
Topic: 26974 Message: 26980

Another thing that puzzles me, why does the crystal produce a ragged waveform? Is that normal or is something wrong with my setup?

Leonard

----- Original Message -----
From: "Phil ko6bb1@... [regenrx]" <regenrx@yahoogroups.com>
To: <regenrx@yahoogroups.com>
Sent: Wednesday, August 31, 2016 3:58 PM
Subject: Re: [regenrx] Crystals

> The "Chi-Com" (Sinometer VC2000) I bought a couple years ago has an Xtal
> check function that I found to be very handy. Not sure of the circuit
> used (other than that it's solid state ;-) but you plug the xtal in (if
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> Specializing in DXing NDBs (Longwave Beacons)
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> HF/LF RADIOS:
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> Icom: IC-735 Transceiver, 500Hz CW filter (~1990).
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> SDR: Softrock Ensemble II LF (built from a kit 2015).
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> ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
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> Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh
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> On 9/1/2016 1:30 AM, 'Leonard Meek' lemeek@... [regenrx]
> wrote:

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26981. Re: [regenrx] Crystals

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-01 05:11:23 UTC
From: Tom Lee
Topic: 26974 Message: 26981

It is definitely not normal -- the high Q of a crystal should lead to a near-perfect sinusoid. However, not all oscillators are designed to set the amplitude by some graceful mechanism, so anything goes. Also, if there is enough gain at both the fundamental and overtone modes, it is possible to oscillate simultaneously at more than one frequency. The overtones are not at exact integer multiples of the fundamental, so you can get odd waveforms as the harmonics of the fundamental beat against the overtones.

--Cheers,
Tom

--
Prof. Thomas H. Lee
Allen Bldg., CIS-205
420 Via Palou Mall
Stanford University
Stanford, CA 94305-4070
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On 8/31/2016 10:05 PM, 'Leonard Meek' lemeek@... [regenrx] wrote:
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> To: <regenrx@yahoogroups.com>
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26982. Re: [regenrx] Crystals

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-01 05:07:45 UTC
From: Tom Lee
Topic: 26974 Message: 26982

Very interesting. It is quite possible that those were early 3rd
overtone crystals, with poor activity at the overtone, or the oscillator
simply had too much gain at the fundamental, so that won out over the
overtone.

Thanks for the data, Leonard!

--Cheers,
Tom

--
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> Sent: Wednesday, August 31, 2016 3:48 PM
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>>>
>>> On 08/31/2016 04:06 PM, 'Leonard Meek' lemeek@... [regenrx]
>>> wrote:
>>>> I think I've been pretty naive about crystals. I've had trouble getting
>>>> my
>>>> R'dynes to work dependably, and it seems to be the fault of my crystals.
>>>> I
>>>> have a couple hundred, mostly HC-6 and FT-243. I've always believed the
>>>> marked frequency as gosphel, but while diddling with my Mk.26 I noticed

>>>> some
>>>> inconsistancies. Crystals marked with the same frequency behaved
>>>> differentl,
>>>> so I threw together a little crystal tester. Many of the crystals I was
>>>> using were nowhere near the freq stamped on the case. I checked them
>>>> against
>>>> the pattern on my scope to verify the results. Most were within a couple
>>>> of
>>>> Hz, but some were way less, and others were totally dead. Someone posted
>>>> a
>>>> blurb here a while back on checking crystals, but I don't remember who.
>>>> I
>>>> don't understand all I know so I need a tutorial on crystals. I'm going
>>>> to
>>>> have to test them all before I mess with my R'dynes any more.
>>>>
>>>> Leonard
>>>>
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>>>>
>>>> "In the interest of Regenerating radio's lost art of Regeneration"
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>>>> Yahoo Groups Links
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>> "In the interest of Regenerating radio's lost art of Regeneration"
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>> Yahoo Groups Links
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> "In the interest of Regenerating radio's lost art of Regeneration"
> ------------------------------------
>
> Yahoo Groups Links
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>

26983. Re: Crystals

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-01 08:19:16 UTC
From: les.au49@...
Topic: 26974 Message: 26983

Hello Leonard,

I built a Colpitts oscillator using bipolar transistors.
When I took the signal from the cathode (sorry, I meant emitter) I got a distorted waveform.

I put a capacitor in series with the crystal and took the signal out from the junction of the crystal and the capacitor. There, I got a sine-like signal.

Later I read that the signal taken from the cathode (sorry, source) of a JFET oscillator was distorted because the device was biased to operate as a class "C" device. From my understanding this means that the bias is set so that current flows through the amplifier for about 1/3 of the signal cycle.

A long time ago I built a 500kHz oscillator (based on a 'toob', and yes, it had a cathode, not an emitter).
I was surprised to see that the signal was rather square wave-like but with a slow-rising and falling edge.
That meant the 'toob' had too much gain, so it was both saturating and cut off during the cycle.

More than that, I saw the 7th harmonic on the 'high' edge of the signal - I could easily count the seven "cycles" in the overtone. (I thought that was 'way cool' and took a photo of the signal! It was very exciting so "see" evidence of what I had only read about in books!)

So - I hope my account here about distortion helps the general understanding about what's going on in your circuit.

One final point. The 74HC4060 is a very handy chip to have where crystals are concerned. (Or even a vanilla HEF4060) With a power supply, the chip and a crystal you can quickly build a 'knock-up' oscillator. An additional bonus is that the chip will provide signals that are binary divisions of your crystal frequency. The chip costs less than $1.00

Les

26984. Re: [regenrx] Crystals

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-01 17:18:53 UTC
From: Leonard Meek
Topic: 26974 Message: 26984

Thanks for the explanation, Tom. That clears up some of my misconceptions.

Leonard

----- Original Message -----
From: "Tom Lee tomlee@... [regenrx]" <regenrx@yahoogroups.com>
To: <regenrx@yahoogroups.com>
Sent: Wednesday, August 31, 2016 7:11 PM
Subject: Re: [regenrx] Crystals

> It is definitely not normal -- the high Q of a crystal should lead to a
> near-perfect sinusoid. However, not all oscillators are designed to set
> the amplitude by some graceful mechanism, so anything goes. Also, if
> there is enough gain at both the fundamental and overtone modes, it is
> possible to oscillate simultaneously at more than one frequency. The
> overtones are not at exact integer multiples of the fundamental, so you
> can get odd waveforms as the harmonics of the fundamental beat against
> the overtones.
>
> --Cheers,
> Tom
>
> --
> Prof. Thomas H. Lee
> Allen Bldg., CIS-205
> 420 Via Palou Mall
> Stanford University
> Stanford, CA 94305-4070
> http://www-smirc.stanford.edu
> 650-725-3383 fax
>
>

26985. Re: [regenrx] Re: Crystals

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-01 17:34:34 UTC
From: Leonard Meek
Topic: 26974 Message: 26985

Les, I've noticed the effect you're talking about. One problem I have is my counter doesn't seem to be very sensative, or maybe it's trying to respond to all the overtones. But using my scope and a calculator I can quickly separate the crystals into "close" and "far out" catagories. This gives me more predictable results with my R'dynes, but since my dials only have logging scales, I still need to make up tuning logs for each coil-crystal combination.

Leonard
----- Original Message -----
From: les.au49@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Wednesday, August 31, 2016 10:19 PM
Subject: [regenrx] Re: Crystals

Hello Leonard,

I built a Colpitts oscillator using bipolar transistors.
When I took the signal from the cathode (sorry, I meant emitter) I got a distorted waveform.

I put a capacitor in series with the crystal and took the signal out from the junction of the crystal and the capacitor. There, I got a sine-like signal.

Later I read that the signal taken from the cathode (sorry, source) of a JFET oscillator was distorted because the device was biased to operate as a class "C" device. From my understanding this means that the bias is set so that current flows through the amplifier for about 1/3 of the signal cycle.

A long time ago I built a 500kHz oscillator (based on a 'toob', and yes, it had a cathode, not an emitter).
I was surprised to see that the signal was rather square wave-like but with a slow-rising and falling edge.
That meant the 'toob' had too much gain, so it was both saturating and cut off during the cycle.

More than that, I saw the 7th harmonic on the 'high' edge of the signal - I could easily count the seven "cycles" in the overtone. (I thought that was 'way cool' and took a photo of the signal! It was very exciting so "see" evidence of what I had only read about in books!)

So - I hope my account here about distortion helps the general understanding about what's going on in your circuit.

One final point. The 74HC4060 is a very handy chip to have where crystals are concerned. (Or even a vanilla HEF4060) With a power supply, the chip and a crystal you can quickly build a 'knock-up' oscillator. An additional bonus is that the chip will provide signals that are binary divisions of your crystal frequency. The chip costs less than $1.00

Les

26986. Re: Crystals

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-02 00:43:55 UTC
From: les.au49@...
Topic: 26974 Message: 26986

Hello Leonard,

Does your counter have a control called "trigger level" or "level" or something like that? If "yes" then feed the signal from a crystal that shows some harmonic frequency and adjust the "level" and watch the counter/frequency. You may be surprised.

As for logging scales, I think these are pretty useful for us novices, especially if we have a 25 (or 50) kilo-Hertz "spot" marker. I built a "way cool" circuit that generated 1,000kHz, 500kHz, 100kHz and 25kHz "spots". I call it my "leopard" circuit, because the spots don't change!

And while I'm here - how many readers use a 'spot' maker, and how many would be interested in a card (or circuit) that did this simple task?

Keep up the good work, Leonard.
I like your designs (and circuits).
If you knew how many hours I have spent looking at each circuit diagram you'd be pleased!

Les

26987. Re: [regenrx] Re: Crystals

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-02 01:03:18 UTC
From: Bill Cromwell
Topic: 26974 Message: 26987

Hi Gangue,

I have a 'spot maker' or two or three here. Between/among spot makers, rf signal generators, frequency counters, calibrated receivers, and such we can identify some number of "spots" on the logging scale. Then put those "spots" into a spread sheet so that it can generate and print a 'tuning curve' with logging dial numbers on one axis and frequency on the other (no z-axis needed). Give this a try with your "pretty" dial that reads directly in frequency and see that it is really curved and not perfectly straight across it's tuning range. All that money for perfection. Shame!

The RAK-7 and SW-3 have logging scale dials and both of them are slightly curved through most of the tuning range with a little more curve at each end. My "pretty" dials like the ones on the Kenwood VFOs and the Heath rigs also have that curve. They don't use quite the entire tuning range of the tuning cap so the dial scales are a little straighter (avoiding the decreasing radius at the ends). Other tricks can decrease the error rate as we tune across the range too. Logging scales are far, far from "useless". I have been able to preset radios with the old zero to 100 (or 1000) logging scale dials to an expected net frequency and end up zero beat with the transmitter when it comes on air. That's not any worse than other receivers with fancier scales.

73,

Bill KU8H

On 09/01/2016 08:43 PM, les.au49@... [regenrx] wrote:
>
> Hello Leonard,
>
> Does your counter have a control called "trigger level" or "level" or
> something like that?
> If "yes" then feed the signal from a crystal that shows some harmonic
> frequency and adjust the "level" and watch the counter/frequency. You
> may be surprised.
>
> As for logging scales, I think these are pretty useful for us novices,
> especially if we have a 25 (or 50) kilo-Hertz "spot" marker. I built
> a "way cool" circuit that generated 1,000kHz, 500kHz, 100kHz and 25kHz
> "spots". I call it my "leopard" circuit, because the spots don't change!
>
> And while I'm here - how many readers use a 'spot' maker, and how many
> would be interested in a card (or circuit) that did this simple task?
>

> Keep up the good work, Leonard.
> I like your designs (and circuits).
> If you knew how many hours I have spent looking at each circuit
> diagram you'd be pleased!
>
> Les
>
>

--
bark less - wag more

26988. Re: [regenrx] Re: Crystals

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-02 04:49:14 UTC
From: Leonard Meek
Topic: 26974 Message: 26988

Thanks, Les. I never thought of using the level control that way. I usually just leave it in auto.

As for my circuits, I welcome critique from anyone (except Donald Trump) Now that I have a handle on crsytals, I can go back to my R'dynes and upgrade them.

Leonard

----- Original Message -----
From: les.au49@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Thursday, September 01, 2016 2:43 PM
Subject: [regenrx] Re: Crystals

Hello Leonard,

Does your counter have a control called "trigger level" or "level" or something like that? If "yes" then feed the signal from a crystal that shows some harmonic frequency and adjust the "level" and watch the counter/frequency. You may be surprised.

As for logging scales, I think these are pretty useful for us novices, especially if we have a 25 (or 50) kilo-Hertz "spot" marker. I built a "way cool" circuit that generated 1,000kHz, 500kHz, 100kHz and 25kHz "spots". I call it my "leopard" circuit, because the spots don't change!

And while I'm here - how many readers use a 'spot' maker, and how many would be interested in a card (or circuit) that did this simple task?

Keep up the good work, Leonard.
I like your designs (and circuits).
If you knew how many hours I have spent looking at each circuit diagram you'd be pleased!

Les

26989. Re: [regenrx] Re: Crystals

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-02 04:49:14 UTC
From: Leonard Meek
Topic: 26974 Message: 26989

Thanks, Les. I never thought of using the level control that way. I usually just leave it in auto.

As for my circuits, I welcome critique from anyone (except Donald Trump) Now that I have a handle on crsytals, I can go back to my R'dynes and upgrade them.

Leonard

----- Original Message -----
From: les.au49@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Thursday, September 01, 2016 2:43 PM
Subject: [regenrx] Re: Crystals

Hello Leonard,

Does your counter have a control called "trigger level" or "level" or something like that? If "yes" then feed the signal from a crystal that shows some harmonic frequency and adjust the "level" and watch the counter/frequency. You may be surprised.

As for logging scales, I think these are pretty useful for us novices, especially if we have a 25 (or 50) kilo-Hertz "spot" marker. I built a "way cool" circuit that generated 1,000kHz, 500kHz, 100kHz and 25kHz "spots". I call it my "leopard" circuit, because the spots don't change!

And while I'm here - how many readers use a 'spot' maker, and how many would be interested in a card (or circuit) that did this simple task?

Keep up the good work, Leonard.
I like your designs (and circuits).
If you knew how many hours I have spent looking at each circuit diagram you'd be pleased!

Les

26990. Online Antentop magazine 01- 2016 is ready

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-04 03:34:52 UTC
From: Igor Grigorov
Topic: 26990 Message: 26990

Hi guys,

Online Antentop magazine 01- 2016 is ready.

Antennas, receivers, stuff for hams- all you find there.

Direct link:

http://antentop.org/020/cont020.htm

Best Regards, 73,

Igor, VA3ZNW

26991. WTB: Homebrew Tube Regens, Unfinished Projects, Parts

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-04 12:58:38 UTC
From: n3bjdx@...
Topic: 26991 Message: 26991

Looking for homebrew tube regens that may be going unused or uncompleted projects. Working, non-working, closet queens considered. Also, strategic parts or part collections related to the construction of tube regens.
Please let me know what you may have that is surplus to your needs.

Alan, N3BJ

26992. Re: [regenrx] Online Antentop magazine 01- 2016 is ready

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-04 20:57:56 UTC
From: G4DFV
Topic: 26990 Message: 26992

Hi Igor,

Please can you re-send to me the Contents part of Online Antentop 01-2016?

I mistakenly deleted mine by accident!

Best 72/3

Duncan G4DFV

26994. WTB: Kitchen High Performance Regen Receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-05 11:20:59 UTC
From: n3bjdx@...
Topic: 26994 Message: 26994

Looking for the above Kitchen regen complete and working OR in any state - a parts kit that was never built, a partially completed kit or strategic parts. Please let me know what you have. Might consider another KItchen receiver in working order, too. Could purchase or have lots of QRP rigs to trade.

Alan, N3BJ

26995. AF Amplifier kit

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-05 16:35:24 UTC
From: Phil
Topic: 26995 Message: 26995

OT, after a 7 year hiatus I'm getting ready to put my 10M beacon back on the air (why do I always do this during the sunspot lows). I was looking for an IDer kit and ran across this little amplifier. It's cheap and simple, but may fill the need for somebody.

NO, I'm not in the market or need one. But there has been a lot of discussion on this list about various versions.

http://www.hamgadgets.com/hamradio/LM386-AMP-MOD

--

73 From "The Beaconeer's Lair"
Specializing in DXing NDBs (Longwave Beacons)
Phil, KO6BB, http://www.qsl.net/ko6bb/

HF/LF RADIOS:
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
Icom: IC-7200 Xceiver, DSP IF & filters (~2015).
Kenwood: TS-450SAT Xceiver, cascaded 250/125Hz Inrad filters.
SDR: Softrock Ensemble II LF (built from a kit 2015).

ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 4 Port Antenna Multicoupler, Feeds 4 RX's.
AF Filters: Timewave DSP-599zx & HOMEBREW 8 Hz Filter.

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

26996. Re: [regenrx] AF Amplifier kit

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-05 17:08:47 UTC
From: Bill Cromwell
Topic: 26995 Message: 26996

Heh,

Why would you need a beacon when the cycle is high and everybody knows
the band is open to everywhere all the time - almost. When conditions
get spotty is when a beacon is really needed.

73,

Bill KU8H

On 09/05/2016 12:35 PM, Phil ko6bb1@... [regenrx] wrote:
>
> OT, after a 7 year hiatus I'm getting ready to put my 10M beacon back on
> the air (why do I always do this during the sunspot lows). I was
> looking for an IDer kit and ran across this little amplifier. It's cheap
> and simple, but may fill the need for somebody.
>
> NO, I'm not in the market or need one. But there has been a lot of
> discussion on this list about various versions.
>
> http://www.hamgadgets.com/hamradio/LM386-AMP-MOD
>
> --
>
> 73 From "The Beaconeer's Lair"
> Specializing in DXing NDBs (Longwave Beacons)
> Phil, KO6BB, http://www.qsl.net/ko6bb/
>
> HF/LF RADIOS:
> HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
> Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
> Icom: IC-7200 Xceiver, DSP IF & filters (~2015).
> Kenwood: TS-450SAT Xceiver, cascaded 250/125Hz Inrad filters.
> SDR: Softrock Ensemble II LF (built from a kit 2015).
>
> ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
> HOMEBREW 4 Port Antenna Multicoupler, Feeds 4 RX's.
> AF Filters: Timewave DSP-599zx & HOMEBREW 8 Hz Filter.
>
> ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
> Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
> 37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.
>
> Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh
>
>

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bark less - wag more

26997. 716 regen with darlington pre-amp works fine with all amplifiers

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-06 00:16:35 UTC
From: Rob
Topic: 26997 Message: 26997

716 regen with darlington pre-amp works fine with all amplifiers.

Working through the stack of amplifiers tried with little great results
I added this 2N6486 darlington pre-amp
http://www.learnmorsecode.com/mpf102/darlington01.jpg
http://www.learnmorsecode.com/mpf102/index.html
and ALL of the experimental ampifier circuits cames to life with
desktop audio.....
... LM386... TL431... etc... came to life.... way cool.
And I've been listening to the MI contest tonight:
http://www.miqrp.org/contest.html

26998. Re: 716 regen with darlington pre-amp works fine with all amplifiers

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-06 11:34:59 UTC
From: kf8zn@...
Topic: 26997 Message: 26998

Rob,
That is the one I used, and sent to you.

How did the darlington preamp perform in terms of hiss/noise with no signal?

Mike AC2Q

26999. 716 regen pre-amp battery isolation issues

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-06 13:05:44 UTC
From: Rob
Topic: 26997 Message: 26999

I could tell no difference between using the storebought honeytone amp and
the cobbled circuits.
And the honeytone IS the benchmark comparison..... because I never know
if there IS
CW on the air to listen for on a new experimental circuit unless I
plugged in the honeytone first.

I have made that mistake. I finished contruction at 5AM and heard
nothing, thinking the pre-amp circuit
was a failure and then plugged in the honeytone and heard nothing on the
air, then
12 hours later the same configurations I heard non-stop CW contesting on
both.

As far as hiss goes.....
one of my audio tests is to plug an electric guitar type instrument... a
4 string electric mandolin....
into my audio circuits.... and play classical music:
http://www.jimthorpelivemusic.com/mando/02joyofmansdesire.mp3

This particular current experiment definitely did do precisely what is
what supposed to do
for pre-amplification and the music that came out of the amplifier
circuits was clean in most of the circuits.
One circuit needs some tweeking... the TL431/2N3904/6 push pull circuit
had a lot of grungy distortion...overdeviation clipping.... so I think
I would add some pots to dial in that circuit if I had to use that one.

I have one more issue to work out with the pre-amp with battery
isolation issues.

I shared one 9 volt battery with the 716 regen reveiver and the 2N6426
PCBs but when I
tacked an amplifier circuit to the pre-amp I got constant steady
oscillations.

On 09/06/2016 07:34 AM, kf8zn@... [regenrx] wrote:
>
> Rob,
> That is the one I used, and sent to you.
>
> How did the darlington preamp perform in terms of hiss/noise with no
> signal?
>
> Mike AC2Q
>

>
> ---
>

27000. Re: [regenrx] 716 regen pre-amp battery isolation issues

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-06 13:37:54 UTC
From: Michael
Topic: 26997 Message: 27000

This discussion is giving me clues as to why my 716 seems dodo.

In the loft I might have an old cassette-player. The cassette
record/play head produces a very low output, so the AF amp must be
high-gain and might do the trick.

Any thoughts?

Michael

On 06.09.16 14:05, Rob roomberg@... [regenrx] wrote:

> I could tell no difference between using the storebought honeytone amp
> and the cobbled circuits. And the honeytone IS the benchmark comparison......

27001. 716 regen pre-amp LOW AUDIO level

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-07 01:25:20 UTC
From: Rob
Topic: 26997 Message: 27001

I am not the first person to declare the audio is very low coming out of
the 716 circuit.
Thats why I banged away at amplification circuits for 3 months.
My first pass at the darlinton pre-amp was usinging 4 sets of input
resistor pairs with a jumper for selection.
I was looking for the solution to the question of which of the four sets
was the right set to use.
So peeling out the optional parts the final layout is much simpler:
http://www.learnmorsecode.com/mpf102/darlingONE2.jpg

I got desktop audio out of the one dollar LM386 kit through the pre-amp:

http://www.learnmorsecode.com/help/LM386amp.JPG

On 09/06/2016 09:37 AM, Michael michael.setaazul@...
[regenrx] wrote:
>
> This discussion is giving me clues as to why my 716 seems dodo.
>
> In the loft I might have an old cassette-player. The cassette
> record/play head produces a very low output, so the AF amp must be
> high-gain and might do the trick.
>
> Any thoughts?
>
> Michael
>
> On 06.09.16 14:05, Rob roomberg@... [regenrx] wrote:
>
> > I could tell no difference between using the storebought honeytone amp
> > and the cobbled circuits. And the honeytone IS the benchmark
> comparison......
>
>
> --
> P

27002. Looking for the 716 regen initial message

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-09 16:22:22 UTC
From: slimjimwas@...
Topic: 27002 Message: 27002

I'm looking for the initial message for the 716 regen thread.

I automatically download all regenrx posts (from about 2004) to Eudora, my email client, and could not find it there. I tried going directly to Yahoo Groups, but no luck there, either. I decided it probably started elsewhere - maybe www.learnmorsecode.com http://www.learnmorsecode.com/716/index.html

http://www.learnmorsecode.com/716/index.html

www.learnmorsecode.com http://www.learnmorsecode.com/716/index.html Version 2 https://www.youtube.com/watch?v=iYap-hCLD7Y VK3YE REGEN using 7.16Mhz resonator: https://youtu.be/WREwJQVE8xI?t=390 based on F5LV...

View on www.learnmorsecod... http://www.learnmorsecode.com/716/index.html
Preview by Yahoo

Am I correct?
Jim

27003. Re: [regenrx] Looking for the 716 regen initial message

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-09 19:28:13 UTC
From: Rob
Topic: 27002 Message: 27003

someone posted a link to the YOUTUBE
VK3YE REGEN using 7.16Mhz resonator:
https://youtu.be/WREwJQVE8xI

and version TWO
https://www.youtube.com/watch?v=iYap-hCLD7Y

which I then chased down a schematic and began experimenting with this
7.16 resonator circuit
so I documented what worked for me:
http://www.learnmorsecode.com/716/index.html

http://www.learnmorsecode.com/716/716.html

and then chased down how to make it louder....
because I bare got headphone audio out of my first LM386 cicuit.....
but
unsuccessfully playing with TDA7052 chips
then definitely successful
with an array of amplifier circuits:
http://www.learnmorsecode.com/amp/tl431.html
and more recently the addition of a high impedance PRe-AMP
darlington circuit:

http://www.learnmorsecode.com/mpf102/darlington01.jpg
http://www.learnmorsecode.com/mpf102/index.html

Once I added the 2N6426 pre-amp circuit I got desk top or room
filling audio out of all the other circuits
experiments that were way too low audio before the addition of this pre-amp.

On 09/09/2016 12:22 PM, slimjimwas@... [regenrx] wrote:
>
> I'm looking for the initial message for the 716 regen thread.
>
>
> I automatically download all regenrx posts (from about 2004) to
> Eudora, my email client, and could not find it there. I tried going
> directly to Yahoo Groups, but no luck there, either. I decided it
> probably started elsewhere - maybe www.learnmorsecode.com
> <http://www.learnmorsecode.com/716/index.html>
>
>
>
>
> image <http://www.learnmorsecode.com/716/index.html>
>

>
> www.learnmorsecode.com <http://www.learnmorsecode.com/716/index.html>
> Version 2 https://www.youtube.com/watch?v=iYap-hCLD7Y VK3YE REGEN
> using 7.16M hz resonator: https://youtu.be/WREwJQVE8xI?t=390 based on
> F5LV...
>
> View on www.learnmorsecod...
> <http://www.learnmorsecode.com/716/index.html>
>
> Preview by Yahoo
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>
> Am I correct?
>
> Jim
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27004. DXERS UNLIMITED SCRIPT FOR SUNDAY 11 SEPT PROGRAM

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-10 15:12:22 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27004 Message: 27004

Radio Havana Cuba
Dxers Unlimited weekend edition for Sunday 11 Sept 2016
By Arnie Coro
Radio amateur CO2KK
Hola amigos radioaficionados all around the world now enjoying like I am , the much better propagation conditions prevailing thanks to the proximity of the autumn equinox... Yes, as we approach the northern hemisphere autumn equinox, despite the fact that solar activity is low, nevertheless we are happy to see better conditions on all bands from 160 meters to 10 meters... I am Arnie Coro, radio amateur CO2KK your host here at the weekend edition of Dxers Unlimited, and now I will read part of a propagation report that says:
Compared to the last reporting week, the week from September 1 to 7 showed an average daily sunspot numbers that was down, but the solar flux increased, and geomagnetic indices were much more active.
Average daily sunspot number declined from 60.1 to 46.4, while average solar flux went from 87.9 to 95.1. Average planetary A index increased from 8 to 26.6, while average mid-latitude A index rose from 6.9 to 18.1.
The daily planetary A index on September 1-4 was 36, 39, 40 and 28.
It looks like an echo of the solar wind which caused this activity is expected on September 28 through October 1, when the predicted planetary A index is 35, 38, 40 and 25.
Predicted solar flux will be 92, 90, and 85 on September 11-13, 80 on September 14-16, 108 on September 17-19, then 110, 105 and 110 on September 20-22, 112 on September 23-24, 108 on September 25, 105 on September 26-27, 100 on September 28, 95 on September 29 through October 1, 98 on October 2-4, 95 on October 5-6, 90 on October 7-8, 95 on October 9, 100 on October 10-11, 105 on October 12, and 108 on October 13-16. After October 16 flux values meander from 105 to 112.
So , here is my advice, enjoy the favorable HF propagation conditions for the next four weeks ....
Item two: I wrote an article for the Cuban National Amateur Radio Federation web site titled ¨ Propagation Windows and how you can enjoy them ¨ It centered on a short term propagation forecast that showed high probabilities of nice nation wide good 40 meters band conditions from about 4 pm to 8 pm local time.... The article was read by many Cuban radio amateurs and it sparked a lot of activity during the afternoon hours during the past several days. Two of the popular 40 meters band SSB round tables received a substantial increase of check ins.... indicating that the propagation prediction was quite accurate. Now I will be giving the finishing touches to another article about DX windows that will be available from Cuba and the rest of the Caribbean during the equinoctial season....
Item three: 10 meters band operators, please pay attention to what follows.... the 10 meters band beacons will tell you about band openings

that go unnoticed because the lack of amateur radio activity ... In other words, the automatic beacons that are on the air 24 hours a day will tell you to start calling CQ DX even if the 10 meters band shows no stations on the air... The Trans Equatorial Propagation Season is now in full swing and this means that DX on 10 and 6 meters is possible.
Item four: Testing the new generation of LED lamps that are now made here in Cuba to replace the classic 20 or 18 Watts fluorescent lamps... The LED lamps use a switched mode power supply of the auto volt type to feed the five chains of LED lamps that are spaced uniformly along the length of the replacement lamp that fits into the same sockets as the fluorescent tubes... So far my measurements are very encouraging.... seems like very good engineering went into the design of the switched mode power supply that converts the AC line voltage from 85 to 250 volts into the 12 volts direct current used by the LED lamps. Each fluorescent lamp replaced by the new LED fixture saves about half of the electricity used by the classic lamp and produces more light output, plus the fact that the estimated lifetime of the LED assembly is many times longer than the fluorescent 20 or 18 Watts lamps... When installing the new LED lamps you simply remove the starter , and that's it, but if you wish you can also remove the ballast reactor too....
Stay tuned for more radio hobby related information coming from rainy La Habana , Cuba where a low pressure system moving very close North of us is producing much needed rain ...
Back in a few seconds amigos

short musical intercut

Si, sure, this is your favorite radio hobby program, the one and only providing coverage of the ninety two different ways you and I enjoy playing with our radios... Here is now more information about a recent scientific research paper that demostrated the world wide increase in radio frequency noise detected within the frequency range from one hundred kiloHertz to ten megaHertz... The authors compiled actual noise measurements made using time proven technologies and came to the conclusion that the AM medium wave broadcast band reception conditions all around the world have deteriorated significantly especially in urban areas, and even in rural areas the presence of so many electronic devices that use the switched mode power supplies have spoiled the reception of AM stations quite significantly. As a matter of fact, the authors of the well documented research simulated under laboratory conditions how the presence of broadband noise makes reception of even the most powerful local AM stations quite difficult. Another related study, shows that within the frequency range from 10 megaHertz to 100 megaHertz reception has also become more difficult in high density of population urban areas.... Low cost devices like cell phone battery chargers and similar gadgets are the culprits to blame for the ever increasing radio frequency broad band noise levels that are making reception of signals so difficult... Several recent field intensity measurements I made in my residential neighborhood show that TV sets, computers and the cell phone chargers seem to be the main contributors to the extraordinary high noise levels that the spectrum analyzer show

within the frequency range from 500 kiloHertz to one hundred and ten megaHertz.... Now let me add that turning off the AC power system by switching off all the circuit breakers that feed my home, showed only a very slight decrease in the noise levels, indicating that nearby homes are also an important source of the broadband noise that makes AM broadcast band and short wave reception so difficult .
Item five of the weekend edition of Dxers Unlimited... a recent announcement made by one of the world's radio receivers manufacturers seems to be the good news everyone has been waiting for... A new DRM capable receiver that has a multi mode decoder capable of AM, FM and DRM reception and that may be sold at a price equivalent to the present days portable high quality AM, FM and short wave receivers... This may be the breakthrough we are all waiting for, so that DRM and DRM plus and DRM 30 digital radio technologies can finally start to enter the worldwide market place. India seems to be the nation that is most advanced in the creation of a full coverage network of DRM high power transmitters, some of which are now on the air, although the number of radios that can pick up those programs is minimal to say the least.
Now amigos at the end of the show two remainders... we are still well into the thunderstorm season so please disconnect all your external antennas and AC power line cords when you finish listening or operating your ham radio stations... second reminder, it is always important to hear from you... so please take a little time and send me your comments about today's edition of Dxers Unlimited to inforhc at enet dot cu, again inforhc at enet dot cu or via air mail to Arnie Coro Radio Havana Cuba, Havana ,Cuba

27005. successful thermistor PIC POT experiment

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-13 02:57:04 UTC
From: Rob
Topic: 27005 Message: 27005

http://www.learnmorsecode.com/laminator/pic/index.html

All I can say is WOW.
I can't believe this was so easy.
And cheap.

thermistor cost is 20 cents.
PIC16F628 cost a dollar.

MOC3020 Optoisolators cost 30 cents
BTA20 traics cost 40 cents

http://www.learnmorsecode.com/help/triac/triaccontrol.jpg

27006. MC1350 Cookbook?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-13 18:06:34 UTC
From: kf8zn@...
Topic: 27006 Message: 27006

MC1350 Cookbook?

I purchased a lot of MC1350 8pin dip IC's just because it seemed the thing to do.

I have the data sheet, but would welcome any strange/archane/odd circuits using this chip.

Mike Haydon AC2Q

27007. Re: MC1350 Cookbook?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-14 17:53:15 UTC
From: b_weeber@...
Topic: 27006 Message: 27007

Try this one
https://www.google.com/search?q=mc1350p+if+amplifier&tbm=isch
https://www.google.ch/search?q=mc1350p+if+amplifier&hl=de&tbm=isch

27008. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-14 19:56:15 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 27008

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Leonard's Stuff/Mk.26 Mod 2.bmp
Uploaded by : leonardmeek <lemeek@...>
Description : Update

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Leonard%27s%20Stuff/Mk.26%20Mod%202.bmp

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

leonardmeek <lemeek@...>

27009. Challenge for you Regen builders

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-15 17:06:33 UTC
From: Phil
Topic: 27009 Message: 27009

Here's a challenge for your homebrewed Regen receiver.

Just yesterday, after a 7 year hiatus I 'reactivated' my 10 Meter beacon. Rig is a Realistic HTX-100 running ~20 Watts CW into a Cushcraft AR-10 'Ringo' antenna that's 14 feet AGL. Frequency is 28.290 MHz.

--

73 From "The Beaconeer's Lair"
Specializing in DXing NDBs (Longwave Beacons)
Phil, KO6BB, http://www.qsl.net/ko6bb/
KO6BB/B beacon, ~20W to a Ringo Vertical on 28.290 MHz

HF/LF RADIOS:
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
Icom: IC-7200 Xceiver, DSP IF & filters (~2015).
Kenwood: TS-450SAT Xceiver, cascaded 250/125Hz Inrad filters.
SDR: Softrock Ensemble II LF (built from a kit 2015).

ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 4 Port Antenna Multicoupler, Feeds 4 RX's.
AF Filters: Timewave DSP-599zx & HOMEBREW 8 Hz Filter.

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.
Cushcraft AR-10 Ringo at 14 feet AGL for 10M beacon.
Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

27010. Re: [regenrx] Crystals

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-15 17:19:39 UTC
From: geoman4919@...
Topic: 26974 Message: 27010

Hi is there any chance that these crystals are operating at the fundamental frequency and they are marked for some multiple of the fundamental frequency(aka overtone)? Kinda sounds like it!

73
jim
kd6iwd

27011. Re: [regenrx] Challenge for you Regen builders

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-15 17:35:36 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27009 Message: 27011

OK amigo ! CONGRATULATIONS !!!

That is a nice contribution to the development of amateur radio...
especially during the low ebb of the solar cycle.

Will mention your NEW beacon during my Dxers Unlimited weekend edition
that will be on the air Sunday and Monday UTC over Radio Havana Cuba

73 and DX

Arnie Coro CO2KK .... promoter of the outstanding performance
REGENERODYNE receiver circuit ....

On 15/09/16 13:06, Phil ko6bb1@... [regenrx] wrote:
> Here's a challenge for your homebrewed Regen receiver.
>
> Just yesterday, after a 7 year hiatus I 'reactivated' my 10 Meter
> beacon. Rig is a Realistic HTX-100 running ~20 Watts CW into a
> Cushcraft AR-10 'Ringo' antenna that's 14 feet AGL. Frequency is 28.290
> MHz.
>

27012. Re: [regenrx] Crystals

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-15 17:43:51 UTC
From: Leonard Meek
Topic: 26974 Message: 27012

That's what I suspect, Jim. I would think if I added a tuned circuit to the output of the oscillator, I could tune it to one or more of the harmonics. Crystals are new to me (or vice versa) so I don't really understand the markings. Some of them are actually labeled "Overtone." Others have a crystal frequency and a channel frequency marked on them, mostly FT-243's. What I need is a tutorial on crystals, in one sylable words.

Leonard

----- Original Message -----
From: geoman4919@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Thursday, September 15, 2016 7:19 AM
Subject: Re: [regenrx] Crystals

Hi is there any chance that these crystals are operating at the fundamental frequency and they are marked for some multiple of the fundamental frequency(aka overtone)? Kinda sounds like it!

73
jim
kd6iwd

27013. Denco Coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-18 21:42:20 UTC
From: jod2005@...
Topic: 27013 Message: 27013

When Denco were making coils they had a transistor range (blue for rf) and a dual purpose range (green for tubes and fets). Both these sets covered the same tuning ranges. Can anyone explain in easy to understand terms why they would be constructed differently for use with the same capacitor for the same range?

I understand that tubes and fets have higher input impedances but don't understand how that would impact on the structure of the coil. Has it got anything to do with internal capacitance of the active devices?

The Denco literature for Transistor and Dual Purpose Coils both state that for Range 4 for example, the range covered is 5 - 15 MHz and the Inductance for each is the same at 2.9 uH.

So what is the difference?

John

27014. Re: Denco Coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-20 08:26:34 UTC
From: jod2005@...
Topic: 27013 Message: 27014

Well it would seem that nobody would like to contribute to this. The reason I ask is I obtained a box of 15 Denco coils, only white and yellow mostly range 5. I think these coils were used mainly in superhets. Today I wouldn't use these if I were building a superhet but opt for Toko coils instead.

So I want to rewind them for regens. I'm building Charles Kitchins High Performance Regen and intend using these plugin coils for various bands. I've already done one for 20 meters and the result is very good. But the fact that there were different coils for transistors and Fets puzzles me. Perhaps if I knew what the difference was I could even better results.

John

27015. Re: Denco Coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-20 10:12:41 UTC
From: dawmast@...
Topic: 27013 Message: 27015

BJTs have a low-Z at the base, that's the reason why link coil or coil taps are needed to connect the base onto a tank circuit. BJTs also have a much higher transconductance than FETs does, coils for BJT Armstrong oscillator circuits have less tickler windings than coils for FET Armstrong type oscillator.

27017. Re: Denco Coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-20 07:42:21 UTC
From: Philip Hobson
Topic: 27013 Message: 27017

The difference is likely simply the tapping point of the coil as bipolar impedance is much lower than for tubes/valves and fets.
73 Philip

27018. Re: Denco Coils

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-20 11:55:54 UTC
From: Bill Higgs
Topic: 27013 Message: 27018

John,

Not entirely sure on this, but an older Radio Communications Handbook (British) from 1971 shows a transistorized superhet with Denco coils in the front end. The coil has three windings: an untuned antenna winding (low impedance), a tuned winding, and an output winding. I'm guessing that the difference between the transistor and FET coils is the impedance of the output winding: lower for the transistor, and higher for tube grid/FET.

--

Bill, NT4C

27020. McMurdo-Silver 801 Regen.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-20 18:29:19 UTC
From: Richard
Topic: 27020 Message: 27020

Does anyone have experience with it? I just acquired one and am finding many bad parts - it must have been very wet. Of interest, it is usable to 63 Mc, and the grid leak resistor is merely 150k Ohms, a very low resistance for grid leak. My theory is it's necessary for stability (no super-regeneration) at VHF, but recovered audio will be low.

Richard, AA1P

27021. 304TL seen in major movie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-23 15:08:18 UTC
From: Jim Wiley
Topic: 27021 Message: 27021

This may be old news, but since I am an old movie fan (in more than one sense of the word), I thought it might be of some interest.

In the circa 1995 remake of Billy Wilder's 1954 film "Sabrina", starring Harrison Ford and Julia Ormond, there is a genuine Eimac 304TL sitting on Harrison Ford's desk, seen in 3 or 4 scenes. As I said, could be old news, but it was new to me.

- Jim, KL7CC

27022. Re: [regenrx] 304TL seen in major movie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-23 18:08:47 UTC
From: john ruccolo
Topic: 27021 Message: 27022

I'm not much for remakes, but I'll have to check that out.

This probably is old news: did you ever see "The House on 92nd Street?" All kinds of classic boat anchors in there.

73,

John, KC2UAK

Sent from my CRM-114

> On Sep 23, 2016, at 11:08 AM, Jim Wiley jwiley@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
> This may be old news, but since I am an old movie fan (in more than one
> sense of the word), I thought it might be of some interest.
>
> In the circa 1995 remake of Billy Wilder's 1954 film "Sabrina", starring
> Harrison Ford and Julia Ormond, there is a genuine Eimac 304TL sitting
> on Harrison Ford's desk, seen in 3 or 4 scenes. As I said, could be old
> news, but it was new to me.
>
>
> - Jim, KL7CC
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> "In the interest of Regenerating radio's lost art of Regeneration"
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> Yahoo Groups Links
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27023. Re: [regenrx] 304TL seen in major movie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-23 20:02:09 UTC
From: Jim Wiley
Topic: 27021 Message: 27023

Yes, starring Lloyd Nolan IIRC. Good flick.

- Jim, KL7CC

On 9/23/2016 10:08 AM, john ruccolo jr6v6gt@... [regenrx] wrote:
>
> I'm not much for remakes, but I'll have to check that out.
>
> This probably is old news: did you ever see "The House on 92nd
> Street?" All kinds of classic boat anchors in there.
>
> 73,
>
> John, KC2UAK
>
> Sent from my CRM-114
>
> > On Sep 23, 2016, at 11:08 AM, Jim Wiley jwiley@... [regenrx]
> <regenrx@yahoogroups.com> wrote:
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> > This may be old news, but since I am an old movie fan (in more than one
> > sense of the word), I thought it might be of some interest.
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> >
> >
> > - Jim, KL7CC
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27024. Re: [regenrx] 304TL seen in major movie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-23 21:17:28 UTC
From: Tom Lee
Topic: 27021 Message: 27024

Thanks for the recommendation! I'll be watching it this weekend.

--Cheers,
Tom

--
Prof. Thomas H. Lee
Allen Bldg., CIS-205
420 Via Palou Mall
Stanford University
Stanford, CA 94305-4070
http://www-smirc.stanford.edu
650-725-3383 fax

On 9/23/2016 11:08 AM, john ruccolo jr6v6gt@... [regenrx] wrote:
>
> I'm not much for remakes, but I'll have to check that out.
>
> This probably is old news: did you ever see "The House on 92nd
> Street?" All kinds of classic boat anchors in there.
>
> 73,
>
> John, KC2UAK
>
> Sent from my CRM-114
>
> > On Sep 23, 2016, at 11:08 AM, Jim Wiley jwiley@... [regenrx]
> <regenrx@yahoogroups.com> wrote:
> >
> > This may be old news, but since I am an old movie fan (in more than one
> > sense of the word), I thought it might be of some interest.
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> > - Jim, KL7CC
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> > "In the interest of Regenerating radio's lost art of Regeneration"
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27025. Re: [regenrx] 304TL seen in major movie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-23 21:29:49 UTC
From: john ruccolo
Topic: 27021 Message: 27025

Hi Tom,

I bet you'll like it. Good flick, and LOTS of classic Hallicrafters/Hammarlund/National gear.

Regards,

John

Sent from my CRM-114

> On Sep 23, 2016, at 5:17 PM, Tom Lee tomlee@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
> Thanks for the recommendation! I'll be watching it this weekend.
>
> --Cheers,
> Tom
> --
> Prof. Thomas H. Lee
> Allen Bldg., CIS-205
> 420 Via Palou Mall
> Stanford University
> Stanford, CA 94305-4070
> http://www-smirc.stanford.edu
> 650-725-3383 fax
>> On 9/23/2016 11:08 AM, john ruccolo jr6v6gt@... [regenrx] wrote:
>>
>> I'm not much for remakes, but I'll have to check that out.
>>
>> This probably is old news: did you ever see "The House on 92nd Street?" All kinds of classic boat anchors in there.
>>
>> 73,
>>
>> John, KC2UAK
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>> > This may be old news, but since I am an old movie fan (in more than one
>> > sense of the word), I thought it might be of some interest.
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>> > In the circa 1995 remake of Billy Wilder's 1954 film "Sabrina", starring

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27026. Re: [regenrx] 304TL seen in major movie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-23 22:20:57 UTC
From: Charles Moizeau
Topic: 27021 Message: 27026

Far better than just a "Good flick"! It was many years ago when I saw it in a theater. The talk here makes me want to renew that powerful experience.

Charles

_____
From: regenrx@...m <regenrx@yahoogroups.com> on behalf of john ruccolo jr6v6gt@... [regenrx] <regenrx@yahoogroups.com>
Sent: Friday, September 23, 2016 5:29 PM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] 304TL seen in major movie

Hi Tom,

I bet you'll like it. Good flick, and LOTS of classic Hallicrafters/Hammarlund/National gear.

Regards,

John

Sent from my CRM-114

On Sep 23, 2016, at 5:17 PM, Tom Lee tomlee@...<mailto:tomlee@...anford.edu> [regenrx] <regenrx@yahoogroups.com<mailto:regenrx@yahoogroups.com>> wrote:

Thanks for the recommendation! I'll be watching it this weekend.

--Cheers,
Tom

--
Prof. Thomas H. Lee
Allen Bldg., CIS-205
420 Via Palou Mall
Stanford University
Stanford, CA 94305-4070
http://www-smirc.stanford.edu
650-725-3383 fax

On 9/23/2016 11:08 AM, john ruccolo jr6v6gt@yahoo.com<mailto:jr6v6gt@...> [regenrx] wrote:

I'm not much for remakes, but I'll have to check that out.

This probably is old news: did you ever see "The House on 92nd Street?" All kinds of classic boat anchors in there.

73,

John, KC2UAK

Sent from my CRM-114

> On Sep 23, 2016, at 11:08 AM, Jim Wiley jwiley@...<mailto:jwiley@...> [regenrx]
<regenrx@yahoogroups.com><mailto:regenrx@yahoogroups.com> wrote:
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> In the circa 1995 remake of Billy Wilder's 1954 film "Sabrina", starring
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> "In the interest of Regenerating radio's lost art of Regeneration"
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27027. Re: [regenrx] 304TL seen in major movie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-23 22:28:59 UTC
From: Cecil Bayona
Topic: 27021 Message: 27027

On 9/23/2016 5:20 PM, Charles Moizeau w2sh@... [regenrx] wrote:
>
>
> Far better than just a "Good flick"! It was many years ago when I saw
> it in a theater. The talk here makes me want to renew that powerful
> experience.
>
>
> Charles
>
>

NetFlix does not have it but they have a description and it sounds interesting. If enough persons put it on their list they might make it available. It should be inexpensive for them to get that old movie.

--
Cecil - k5nwa
http://thepartsplace.k5nwa.com/

27028. Re: [regenrx] 304TL seen in major movie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-23 22:34:51 UTC
From: Tom Lee
Topic: 27021 Message: 27028

I just discovered that it's also on Youtube (at least at the moment).

Once again, thank you, John. I'm looking forward to watching this
classic. Any film that features our beloved BAs is a special treat.

--Cheers,
Tom

--
Prof. Thomas H. Lee
Allen Bldg., CIS-205
420 Via Palou Mall
Stanford University
Stanford, CA 94305-4070
http://www-smirc.stanford.edu
650-725-3383 fax

On 9/23/2016 3:28 PM, Cecil Bayona cecil.bayona@... [regenrx] wrote:
>
> On 9/23/2016 5:20 PM, Charles Moizeau w2sh@... [regenrx] wrote:
> >
> >
> > Far better than just a "Good flick"! It was many years ago when I saw
> > it in a theater. The talk here makes me want to renew that powerful
> > experience.
> >
> >
> > Charles
> >
> >
>
> NetFlix does not have it but they have a description and it sounds
> interesting. If enough persons put it on their list they might make it
> available. It should be inexpensive for them to get that old movie.
>
> --
> Cecil - k5nwa
> http://thepartsplace.k5nwa.com/
>
>

27029. Re: [regenrx] 304TL seen in major movie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-23 23:00:26 UTC
From: Cecil Bayona
Topic: 27021 Message: 27029

Thanks, in glorious Black and White, now that is going back a few days,
like regens.

I don't know why I didn't check there, I have watched a few of their old
complete movies that NetFlix didn't have, getting old I suppose.

On 9/23/2016 5:34 PM, Tom Lee tomlee@... [regenrx] wrote:
>
>
> I just discovered that it's also on Youtube (at least at the moment).
>
> Once again, thank you, John. I'm looking forward to watching this
> classic. Any film that features our beloved BAs is a special treat.
>
> --Cheers,
> Tom
>
> --
> Prof. Thomas H. Lee
> Allen Bldg., CIS-205
> 420 Via Palou Mall
> Stanford University
> Stanford, CA 94305-4070
> http://www-smirc.stanford.edu
> 650-725-3383 fax
>
> On 9/23/2016 3:28 PM, Cecil Bayona cecil.bayona@... [regenrx] wrote:
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>> On 9/23/2016 5:20 PM, Charles Moizeau w2sh@... [regenrx] wrote:
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>> NetFlix does not have it but they have a description and it sounds
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>> available. It should be inexpensive for them to get that old movie.
>>

>> --
>> Cecil - k5nwa
>> http://thepartsplace.k5nwa.com/

--
Cecil - k5nwa
http://thepartsplace.k5nwa.com/

27030. Re: [regenrx] 304TL seen in major movie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-24 03:02:25 UTC
From: Charles Moizeau
Topic: 27021 Message: 27030

Gosh, it was 1945, 20 years before my first ham license, when I only knew one meaning for boat anchor. The film is an historically accurate drama. A 720-word NY Times review can be found at:

http://www.nytimes.com/movie/review?res=EE05E7DF1739E26BBC4F51DFBF66838E659EDE

Charles

<http://www.nytimes.com/movie/review?res=EE05E7DF1739E26BBC4F51DFBF66838E659EDE>

<http://www.nytimes.com/movie/review?res=EE05E7DF1739E26BBC4F51DFBF66838E659EDE>

<http://www.nytimes.com/movie/review?res=EE05E7DF1739E26BBC4F51DFBF66838E659EDE>

<http://www.nytimes.com/movie/review?res=EE05E7DF1739E26BBC4F51DFBF66838E659EDE>

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<http://www.nytimes.com/movie/review?res=EE05E7DF1739E26BBC4F51DFBF66838E659EDE>

<http://www.nytimes.com/movie/review?res=EE05E7DF1739E26BBC4F51DFBF66838E659EDE>

Movie Review - - THE HOUSE ON NINETY-SECOND STREET
...<http://www.nytimes.com/movie/review?res=EE05E7DF1739E26BBC4F51DFBF66838E659EDE>
www.nytimes.com
Like the Army and the Navy, the Federal Bureau of Investigation has a story to tell about its wartime activities, and that story, as it unfolded yesterday on the ...

From: regenrx@yahoogroups.com <regenrx@yahoogroups.com> on behalf of Cecil Bayona cecil.bayona@... [regenrx] <regenrx@yahoogroups.com>
Sent: Friday, September 23, 2016 7:00 PM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] 304TL seen in major movie

Thanks, in glorious Black and White, now that is going back a few days,
like regens.

I don't know why I didn't check there, I have watched a few of their old
complete movies that NetFlix didn't have, getting old I suppose.

On 9/23/2016 5:34 PM, Tom Lee tomlee@ee.stanford.edu [regenrx] wrote:
>

>
> I just discovered that it's also on Youtube (at least at the moment).
>
> Once again, thank you, John. I'm looking forward to watching this
> classic. Any film that features our beloved BAs is a special treat.
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> --
> Prof. Thomas H. Lee
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> On 9/23/2016 3:28 PM, Cecil Bayona cecil.bayona@... [regenrx] wrote:
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>> On 9/23/2016 5:20 PM, Charles Moizeau w2sh@... [regenrx] wrote:
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>> > Far better than just a "Good flick"! It was many years ago when I saw
>> > it in a theater. The talk here makes me want to renew that powerful
>> > experience.
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>> NetFlix does not have it but they have a description and it sounds
>> interesting. If enough persons put it on their list they might make it
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>> http://thepartsplace.k5nwa.com/

--
Cecil - k5nwa
http://thepartsplace.k5nwa.com/

27031. Re: [regenrx] 304TL seen in major movie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-24 03:50:47 UTC
From: john ruccolo
Topic: 27021 Message: 27031

It is a very good movie. I just didn't want to oversell it to the group. ;-)

Sent from my CRM-114

> On Sep 23, 2016, at 11:02 PM, Charles Moizeau w2sh@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
> Gosh, it was 1945, 20 years before my first ham license, when I only knew one meaning for boat anchor. The film is an historically accurate drama. A 720-word NY Times review can be found at:
>
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> http://www.nytimes.com/movie/review?res=EE05E7DF1739E26BBC4F51DFBF66838E659EDE
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> Charles
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> Movie Review - - THE HOUSE ON NINETY-SECOND STREET ...
> www.nytimes.com
> Like the Army and the Navy, the Federal Bureau of Investigation has a story to tell about its wartime activities, and that story, as it unfolded yesterday on the ...
>

>
>
> From: regenrx@yahoogroups.com <regenrx@yahoogroups.com> on behalf of Cecil Bayona
cecil.bayona@... [regenrx] <regenrx@yahoogroups.com>
> Sent: Friday, September 23, 2016 7:00 PM
> To: regenrx@yahoogroups.com
> Subject: Re: [regenrx] 304TL seen in major movie
>
>
> Thanks, in glorious Black and White, now that is going back a few days,
> like regens.
>
> I don't know why I didn't check there, I have watched a few of their old
> complete movies that NetFlix didn't have, getting old I suppose.
>
> On 9/23/2016 5:34 PM, Tom Lee tomlee@... [regenrx] wrote:
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> >
> > I just discovered that it's also on Youtube (at least at the moment).
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> > Once again, thank you, John. I'm looking forward to watching this
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> > --Cheers,
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> http://thepartsplace.k5nwa.com/
>

27032. RE: [regenrx] 304TL seen in major movie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-24 06:25:21 UTC
From: Hubert Miller
Topic: 27021 Message: 27032

Looks to me like National NC-240, Hammarlund SP-200, Hallicrafters SX-24 seen in movie, and one corner of a National HRO.
Not sure what the radio is in the spy home lounge.
Dietrich’s radio shack (36:46) though is a bit overdone; 2 expensive National NC-240-D’s, a Hallicrafters HT-4 500 watt AM/CW
transmitter, with the audio preamp on the operating desk to the left of the receiver. On top the transmitter is a whip antenna
loading coil, so i believe the transmitter would have to be the Army version of the HT-4, that is, BC-610. Nice spacing on the
open line antenna feeder. In an earlier scene, where he’s uncrating the radio parts, he handles a transmitter PA coil for the
BC-610. Probably in real life Dietrich would have picked up a second-hand Hallicrafters receiver and built a transmitter with
something like a single 6L6 in the final.
Two cases i am aware of where German agents transmitted from North America, from Quebec and from upstate New York,
the transmitters were German Navy portable sets with about 20 watts output. I always wondered how those could be depended
on to reliably reach back to Hamburg, especially considering the transmit antennas were necessarily a lot less than ideal. I always
wondered if in fact there was some kind of relay station, or system, at work.
-H
re: “House on Ninety Second Street”
https://www.youtube.com/watch?v=Z-BwyzbF7E4
It’s been up on You Tube since 2013, so it’s not going away soon.

27033. Re: [regenrx] 304TL seen in major movie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-24 14:35:47 UTC
From: tbs50a@...
Topic: 27021 Message: 27033

The Nationals are NC-200's. Right above the tuning knob the '200 has the NC logo. the '240 has a round logging dial.Didn't see a HRO but did see a little Howard 5 or 6 tube model and a Collins TDO.
Good detective work!

Terry N3GTE

-----Original Message-----
From: Hubert Miller kargo_cult@msn.com [regenrx] <regenrx@yahoogroups.com>
To: regenrx <regenrx@yahoogroups.com>
Sent: Sat, Sep 24, 2016 2:25 am
Subject: RE: [regenrx] 304TL seen in major movie

Looks to me like National NC-240, Hammarlund SP-200, Hallicrafters SX-24 seen in movie, and one corner of a National HRO.
Not sure what the radio is in the spy home lounge.
Dietrich’s radio shack (36:46) though is a bit overdone; 2 expensive National NC-240-D’s, a Hallicrafters HT-4 500 watt AM/CW
transmitter, with the audio preamp on the operating desk to the left of the receiver. On top the transmitter is a whip antenna
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re: “House on Ninety Second Street”
https://www.youtube.com/watch?v=Z-BwyzbF7E4
It’s been up on You Tube since 2013, so it’s not going away soon.

27034. Re: [regenrx] 304TL seen in major movie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-24 16:00:00 UTC
From: john ruccolo
Topic: 27021 Message: 27034

And the 240's have the decorative "feet" that the 200's do not have.

It's fun spotting this stuff in old movies. I've gotta watch it again to see what I can find....

Sent from my CRM-114

> On Sep 24, 2016, at 10:35 AM, tbs50a@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
> The Nationals are NC-200's. Right above the tuning knob the '200 has the NC logo. the '240 has a round logging dial.Didn't see a HRO but did see a little Howard 5 or 6 tube model and a Collins TDO.
>
> Good detective work!
>
> Terry N3GTE
>
>
> -----Original Message-----
> From: Hubert Miller kargo_cult@msn.com [regenrx] <regenrx@yahoogroups.com>
> To: regenrx <regenrx@yahoogroups.com>
> Sent: Sat, Sep 24, 2016 2:25 am
> Subject: RE: [regenrx] 304TL seen in major movie
>
>
> Looks to me like National NC-240, Hammarlund SP-200, Hallicrafters SX-24 seen in movie, and one corner of a National HRO.
> Not sure what the radio is in the spy home lounge.
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> transmitter, with the audio preamp on the operating desk to the left of the receiver. On top the transmitter is a whip antenna
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> open line antenna feeder. In an earlier scene, where he’s uncrating the radio parts, he handles a transmitter PA coil for the
> BC-610. Probably in real life Dietrich would have picked up a second-hand Hallicrafters receiver and built a transmitter with
> something like a single 6L6 in the final.
> Two cases i am aware of where German agents transmitted from North America, from Quebec and from upstate New York,
> the transmitters were German Navy portable sets with about 20 watts output. I always wondered how those could be depended
> on to reliably reach back to Hamburg, especially considering the transmit antennas were necessarily a lot less than ideal. I always
> wondered if in fact there was some kind of relay station, or system, at work.

> -H
> re: “House on Ninety Second Street”
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>
>

27035. RE: [regenrx] 304TL seen in major movie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-24 18:45:03 UTC
From: Hubert Miller
Topic: 27021 Message: 27035

The TDO – is that the rig on the FBI desk that’s used to call the cars?
To the left of this set on the desk, i think you may see the right portion of an HRO with the dial or partial dial showing.

Or, i’m imagining it.

-H

>Subject: Re: [regenrx] 304TL seen in major movie

The Nationals are NC-200's. Right above the tuning knob the '200 has the NC logo. the '240 has a round logging dial.Didn't see a HRO but did see a little Howard 5 or 6 tube model and a Collins TDO.

Good detective work!

Terry N3GTE

27036. Re: [regenrx] 304TL seen in major movie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-24 20:01:40 UTC
From: tbs50a@...
Topic: 27021 Message: 27036

No it's that BIG TX in the background @ 37:27. Pair of 805 modulating a pair of 813's.
As I see it on the left table is a HT-5 (speech amp for HT-4) and a NC-200 w/spkr.
Right table BC-939 (ant tuner for BC-610) early BC-610, Howard 400 series rx, NC-200 w/spkr, HB ant tuner on ceiling, and a BC-614 (speech amp for BC-610.
Don't think the transmitter is a HT-4 as it has the mil tag on it

The calling all cars tx is unfamiliar to me looks to be military but uses a D-104 mic? Most of the mil sets from WWII I've seen use carbon mics.

Terry

-----Original Message-----
From: Hubert Miller kargo_cult@... [regenrx] <regenrx@yahoogroups.com>
To: regenrx <regenrx@yahoogroups.com>
Sent: Sat, Sep 24, 2016 2:45 pm
Subject: RE: [regenrx] 304TL seen in major movie

The TDO – is that the rig on the FBI desk that’s used to call the cars?
To the left of this set on the desk, i think you may see the right portion of an HRO with the dial or partial dial showing.
Or, i’m imagining it.
-H

>Subject: Re: [regenrx] 304TL seen in major movie
The Nationals are NC-200's. Right above the tuning knob the '200 has the NC logo. the '240 has a round logging dial.Didn't see a HRO but did see a little Howard 5 or 6 tube model and a Collins TDO.
Good detective work!
Terry N3GTE

27037. Re: Mk.21 circuit diagram Courtesy of Leonard !!!

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-25 00:00:05 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27037 Message: 27037
Attachments: 1 described; binary payloads are missing from this source WARC

Muchas gracias amigo !
Thanks a lot....for the circuit diagram that I copy below.
No LM386's available, but that part can be replaced with a discrete NPN transistors audio amplifier ....

73 and DX
Arnie
P.S:Will try 1 mHy RF choke recycled from Compact Fluorescent Lightbulbs... Our CFL's here are Chinese LI YA brand made and do not use FET devices for the power oscillator...

On 29/04/16 00:33, Leonard Meek wrote:
> Remember, the 9001 is actually 6AK5.

27038. Re: [regenrx] 304TL seen in major movie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-25 00:09:46 UTC
From: dulmagedon@...
Topic: 27021 Message: 27038

Thanks for posting these movie notes. Especially the note about The House On 92nd Street. I have been researching and building recreations of the very early German Adapter sets. On testing I discovered they were very practical and can reach out easily in fair to good conditions. I have read books and bought movies on the 1930s/40s spy game (, both sides) and this adds to my arsenal. I tried to buy a copy of the Movie Kontakt. So far no cigar. But perhaps the house on ..... will be more relevant to my research. Any other ones anyone knows of?
donVE3LYX

27039. THE WW II SUBMARINE WAR and the German spy in La Habana

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-25 00:31:46 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27039 Message: 27039

The fate of high tech U'176 submarine was probably sealed by the Cuban radio technicians that located a German spy transmitter in the Old Havana District.

The U'176 with all its 53 crew went down in 1943 after sinking several cargo ships that were transporting sugar and molasses as well as other key product like sulphuric acid for the nickel plant built by the US Government in Eastern Cuba. Cuban Navy Submarine Hunter PS13 was directed to the location where U'176 was located by a US NAVY amphibious Kingfisher that used wing wags to spot the place in very clear waters where the submarine was starting an emergency dive that did not impeded the sinking by the well done attack by the PS13 small wooden submarine hunter...

It was never found out if the spy sent his transmissions directed to the U'176 telling about port activities and departures of possible targets was the submarine as it was sailing around the Caribbean, or actually contacted Germany from where U'176 received the messages .

There is a book in Spanish about Emil Lunning, the spy that was executed by firing squad after all evidences pointed to him as the cause of death of tens of Cuban and American merchant marine sailors sunk by U'176.

Seems like the spy used a very up to date transmitter and receiver, and he was well trained to transmit CW Morse Code radiotelegraphy...

73 and DX

Arnie Coro

CO2KK

27040. Re: [regenrx] 304TL seen in major movie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-25 01:08:05 UTC
From: john ruccolo
Topic: 27021 Message: 27040

Glad you liked it.

I had to take a look. It's a very good "yarn," as they used to say. And at least one of those Hallicrafters sets is one of their lesser-known VHF AM/FM sets, either an S-27 or S-36. It looks like both the FBI and the Germans had one!

Sent from my CRM-114

> On Sep 24, 2016, at 8:09 PM, dulmagedon@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
> Thanks for posting these movie notes. Especially the note about The House On 92nd Street. I have been researching and building recreations of the very early German Adapter sets. On testing I discovered they were very practical and can reach out easily in fair to good conditions. I have read books and bought movies on the 1930s/40s spy game (, both sides) and this adds to my arsenal. I tried to buy a copy of the Movie Kontakt. So far no cigar. But perhaps the house on ..... will be more relevant to my research. Any other ones anyone knows of?
> donVE3LYX
>
>

27041. Re: [regenrx] THE WW II SUBMARINE WAR and the German spy in La Habana

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-25 01:24:53 UTC
From: Richard
Topic: 27039 Message: 27041

One of the hazards to submarine activity off the coast of the USA, and perhaps Cuba, was shallow water. When you cannot dive deep you are very vulnerable.

Richard, AA1P

On 09/24/2016 08:31 PM, 'Prof. Arnaldo Coro Antich' coro@... [regenrx] wrote:

> The fate of high tech U'176 submarine was probably sealed by the Cuban radio technicians that located a German spy transmitter in the Old Havana District.
>
> The U'176 with all its 53 crew went down in 1943 after sinking several cargo ships that were transporting sugar and molasses as well as other key product like sulphuric acid for the nickel plant built by the US Government in Eastern Cuba. Cuban Navy Submarine Hunter PS13 was directed to the location where U'176 was located by a US NAVY amphibious Kingfisher that used wing wags to spot the place in very clear waters where the submarine was starting an emergency dive that did not impeded the sinking by the well done attack by the PS13 small wooden submarine hunter...
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> It was never found out if the spy sent his transmissions directed to the U'176 telling about port activities and departures of possible targets was the submarine as it was sailing around the Caribbean, or actually contacted Germany from where U'176 received the messages .
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> There is a book in Spanish about Emil Lunning, the spy that was executed by firing squad after all evidences pointed to him as the cause of death of tens of Cuban and American merchant marine sailors sunk by U'176.
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> Seems like the spy used a very up to date transmitter and receiver, and he was well trained to transmit CW Morse Code radiotelegraphy...
>
> 73 and DX
>
> Arnie Coro
>
> CO2KK
>
>

27042. Re: [regenrx] Re: Mk.21 circuit diagram Courtesy of Leonard !!!

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-25 04:12:28 UTC
From: Leonard Meek
Topic: 27037 Message: 27042

Arnie, the reason I originally used the 9001 is it was what I used in my first regen 65 years ago. But the 6AK5 works much better. I think a 1mH choke will work fine.

Leonard
----- Original Message -----
From: 'Prof. Arnaldo Coro Antich' coro@... [regenrx]
To: Rob roomberg@... [regenrx] ; Hue Miller
Sent: Saturday, September 24, 2016 2:00 PM
Subject: [regenrx] Re: Mk.21 circuit diagram Courtesy of Leonard !!!

Muchas gracias amigo !
Thanks a lot....for the circuit diagram that I copy below.
No LM386's available, but that part can be replaced with a discrete NPN transistors audio amplifier ....

73 and DX
Arnie
P.S:Will try 1 mHy RF choke recycled from Compact Fluorescent Lightbulbs... Our CFL's here are Chinese LI YA brand made and do not use FET devices for the power oscillator...

27043. Re: THE WW II SUBMARINE WAR and the German spy in La Habana

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-25 11:35:46 UTC
From: dulmagedon@...
Topic: 27039 Message: 27043
Attachments: 2 described; binary payloads are missing from this source WARC

Here is the spy transmitter just for interests sake. Built in a wall socket box and it even has the plug in plate so it can be hidden in a wall totally disguised till required . Then using a normal 1930s/40s home radio the audio output tube is removed and the sets umbilical cord plugged in. The audio tube then is plugged in the box , the antenna hooked up and a key of some sort connected and you are on the air. If the host radio has short wave then a pair of hi imp earphones connected across pin 5 and 8 of the plug will give audio as well and as long as MCW (or AM) is being sent to the agent he is good. By putting a gimmick cap (twisted pair of unconnected wires) around the cap and around one pin of the IF tube a psuedo BFO can be rigged up not unlike what was normal for a S-38 com set. While not perfect it does work to a usable point although MCW which was fitted to many German and Allied transmitters is really the perfect solution. Some adapter sets are said to have plugged in directly however you discover very quickly this limits the host radio you can use to very few so with the umbilical cord plug in any radio using a beam power tube, even 1930s battery sets can host this adapter and operate well. With this set an octal 7AC or 7S pin out is required but that was standard fair back then. In fact all the old radios I have plus all the ones in my brothers collection will and have operated this adapter TX. My first contact about 3/4 of an hour after completion was with Phil, WB4FDT which is a decent distance from here. Anyway interesting subject to me and thanks for all and any info on movies or books about spy activity in North America just prior to WWll as we know it.
donVe3LYX

27044. Re: Crystals

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-25 12:19:43 UTC
From: david.newkirk@...
Topic: 26974 Message: 27044

Leonard wrote:

> Many of the crystals I was using were nowhere near the freq stamped on the case.

As others have mentioned, one reason a crystal may oscillate at a frequency other than that marked on its case is that was processed to operate on an overtone, rather than on its fundamental frequency.

I recently encountered this when I borrowed the "12100" crystal from my Allied A-2516 receiver and installed it in a Pierce oscillator to convert the amateur radio 10-MHz band down to 2 MHz. In my circuit it oscillated near 4 MHz! (The A-2516's first conversion oscillator uses the Miller circuit--tuned plate, crystal grid--and so rejects oscillation modes at other than 12.1 MHz for that crystal.)

A similar hazard with an "aperiodic" (untuned) oscillator like the Pierce is that depending on the feedback capacitances in play--C from oscillator triode grid to common and C from triode plate to common--may cause a crystal processed for oscillation on its fundamental to operate at an overtone instead. I have a 3400-kHz HC-6-cased crystal that was well-behaved in its original Pierce application but oscillated very nicely at about 10.3 MHz in another.

Crystals commonly also have resonances other than their fundamentals and overtones; if a particular circuit happens to allow or enhance operation at one of those, you may be in for even more interesting figure-out-the-frequency adventures!

Best regards,

Dave
amateur radio W9BRD

27045. RE: [regenrx] THE WW II SUBMARINE WAR and the German spy in La Habana

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-25 13:36:21 UTC
From: Larry
Topic: 27039 Message: 27045

Wow! Arne, fascinating! Many thanks!

Larry

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Saturday, September 24, 2016 8:32 PM
To: dulmagedon@...; Rob roomberg@... [regenrx]
Subject: [regenrx] THE WW II SUBMARINE WAR and the German spy in La Habana

The fate of high tech U'176 submarine was probably sealed by the Cuban radio technicians that located a German spy transmitter in the Old Havana District.

The U'176 with all its 53 crew went down in 1943 after sinking several cargo ships that were transporting sugar and molasses as well as other key product like sulphuric acid for the nickel plant built by the US Government in Eastern Cuba. Cuban Navy Submarine Hunter PS13 was directed to the location where U'176 was located by a US NAVY amphibious Kingfisher that used wing wags to spot the place in very clear waters where the submarine was starting an emergency dive that did not impeded the sinking by the well done attack by the PS13 small wooden submarine hunter...

It was never found out if the spy sent his transmissions directed to the U'176 telling about port activities and departures of possible targets was the submarine as it was sailing around the Caribbean, or actually contacted Germany from where U'176 received the messages .

There is a book in Spanish about Emil Lunning, the spy that was executed by firing squad after all evidences pointed to him as the cause of death of tens of Cuban and American merchant marine sailors sunk by U'176.

Seems like the spy used a very up to date transmitter and receiver, and he was well trained to transmit CW Morse Code radiotelegraphy...

73 and DX

Arnie Coro

CO2KK

27046. Re: [Bulk] [regenrx] Re: THE WW II SUBMARINE WAR and the German spy in La Habana [2 Attachments]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-25 13:46:15 UTC
From: Michael
Topic: 27039 Message: 27046

Depending on pending election outcomes both sides of The Pond,
we might need such cunning technology again ere long :-)

Michael

On 25.09.16 12:35, dulmagedon wrote:
> Here is the spy transmitter just for interests sake. Built in a wall
> socket box and it even has the plug in plate so it can be hidden in a
> wall totally disguised till required . Then using a normal 1930s/40s
> home radio the audio output tube is removed and the sets umbilical cord
> plugged in. ...

27047. Re: [Bulk] [regenrx] Re: THE WW II SUBMARINE WAR and the German spy in La Habana [2 Attachments]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-25 14:23:43 UTC
From: l@...
Topic: 27039 Message: 27047

About 25 years ago I read in the Houston Chronicle a story about the local Houston Submariner Society. The group got formed right after WW2 in Houston and to become a member you had to have served in Submarine duty. The group had a Commander. But what was very interesting, he had served in submarine duty within the German Kreigsmarine. (Can't remember his U-Boat number.) He told the story about how his U-boat was stationed in the Gulf of Mexico and was positioned many times just off the coast near Houston. He was impressed with the night skylight of Houston which he could observe from the u-boat. After the war ended he immigrated to Houston as a resident and later became the submarine society's commander.

My father was a Lt. in a US Army intelligence group. However I had a relative, Captain Rudolf Bahr who was captain of U-305. His boat was sunk in the Atlantic in the beginning of 1944.
Lee Bahr, w0vt
Houston, Texas

27048. RE: [regenrx] 304TL seen in major movie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-25 17:02:28 UTC
From: Hubert Miller
Topic: 27021 Message: 27048

Do you recall which scene or location showed the VHF receiver?

>I had to take a look. It's a very good "yarn," as they used to say. And at least one of those Hallicrafters sets is one of their lesser-known VHF AM/FM sets, either an S-27 or S-36. It looks like both the FBI and the Germans >had one!

>Posted by: john ruccolo <jr6v6gt@yahoo.com>

BTW, if one cares to read such stories, there's a book "Agent 146" that's pretty interesting. Erich Gimpel and a turncoat American were landed from a U-boat

in 1944. The story is actually much more interesting, i thought, than the "House on 92nd Street" story because "Agent 146" is by Gimpel, told from his

viewpoint. He was constantly on guard and always in fear that some little clue, like his unfamiliarity with American restaurants or some hint of an accent would

give him away. At some point he found love with an American woman but he had to keep his secrets from her too, and eventually he had sadly to just

disappear from her. Eventually he was captured and sentenced to death, but due to an obscure law forbidding executions during the official mourning period

for the American president, the execution was postponed, and then Germany surrendered, and execution was postponed again. Gimpel served a few years and then

was deported to Germany – so it's just strange twists of fate that saved his life. He even served time in the famous prison Alcatraz, where he socialized with

imprisoned Mafia bigwigs. You can see that his story has more elements that would make for a good movie.

Unfortunately the book has absolutely minimal details about his radio procedure. No receiver is ever mentioned. At one point he goes shopping for a 6L6 tube

for his transmitter, and is wracked by fear that even this will give him away. It occurred to me that he probably arrived with only the crystals he needed and the

telegraph key, which might be suspect items to be shopping for, in 1944 U.S.A. Buying a shortwave receiver would be another challenge and also probably one

that he would be fearful to attempt, so maybe he was already supplied with some simple small receiver. Another book on the Gimpel story by another author

states that Gimpel was to build his own 80-watt transmitter once in America, so if it used 6L6's, i think he'd be using at least two; or who knows, maybe he was

to build something like like the 'adapter set' Don mentioned which plugged into a receiver's output socket. You have to wonder how he could expect to reach

Germany reliably using makeshift antennas from New York city locations. Unfortunately that information is now lost; apparently Gimpel passed away in 2010.

The “Agent 146” book is a republishing of the earlier book “Spy for Germany” and is available in paperback at low prices.

There was a movie made about the Gimpel story, “Spion Fuer Deutschland”, which i recently ordered, along with “KLK an ZTX” (“KLK calling ZTX”) about the

“Red Orchestra” spy network working in Germany. Both movies are unfortunately for most U.S. viewers available only auf deutsch, no subtitles. And they may be in

PAL format, which means a learning curve for me and a bunch of steps i don’t relish, to convert it.

-Hue Miller

27049. Re: [regenrx] Re: Crystals

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-25 17:36:32 UTC
From: Leonard Meek
Topic: 26974 Message: 27049

Thanks for the info, Dave. I suspected this was the problem. I had built a simple crystal tester, basically a Peirce, to test them and found that most of them were oscillating at some sub harmonic of the marked freq. So I built another tester, sane sirsuit, with a tunable tank on the output which could tune to various harmonics. Worked fine, but now I have to redo my regenodynes to select one of the harmonics. They may already be doing that to some extent, but results are not predictable. Good thing I didn't scrap the crystals.

Leonard

----- Original Message -----
From: david.newkirk@gmail.com [regenrx]
To: regenrx@yahoogroups.com
Sent: Sunday, September 25, 2016 2:19 AM
Subject: [regenrx] Re: Crystals

Leonard wrote:

> Many of the crystals I was using were nowhere near the freq stamped on the case.

As others have mentioned, one reason a crystal may oscillate at a frequency other than that marked on its case is that was processed to operate on an overtone, rather than on its fundamental frequency.

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Crystals commonly also have resonances other than their fundamentals and overtones; if a particular circuit happens to allow or enhance operation at one of those, you may be in for even more interesting figure-out-the-frequency adventures!

Best regards,

Dave
amateur radio W9BRD

27050. RE: [regenrx] 304TL seen in major movie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-25 19:56:27 UTC
From: dulmagedon@...
Topic: 27021 Message: 27050
Attachments: 1 described; binary payloads are missing from this source WARC

The main Mother station for Germany was the German Embassy in Washington and you can find stories of the precursor to the FCC making raids there and see some of the photos taken. HRO receiver was in common use by them (bought third party style)as were some clones of a sort. I can get the link if you like from the fellow who showed it to me. A lot of activity was pre WW2 which for us started 1939 and 1941 for US. I am beginning to realize a lot of clandestine activity may have preceded those dates. So operating from eastern Canada and eastern USA would not be hard. Also U boats on the east coast and into the St Lawrence are a matter of record. The adapter set complete will fit in the toe of a work boot . A 6l6 gives a bit more wack. I have tried it on mine. It definitely liked it even without more V. Most host sets had a 6F6 or 50L6. Usually any with shortwave were 6F6. Occasionally you find a 6v6 but mine did like the 6l6 immediately. 300 to 400 miles is normal everyday conditions is possible. With the Shortwave sets you can steal the audio as I said with phones and the radio functions remain intact when not transmitting except of course Audio PA which is now the TX by way of the adapter set. The advantage of using the Host set if it was SW for listening would be no accidental signal from an over advanced regen control. I was surprised how well it worked. I was ready for it not to work if you know what I mean. I am going to look for those Hue. Thanks for mentioning them. I got into this subject accidentally and found it much deeper then I ever would have dreamed. I didn't know anything about it before.
donVe3LYX
The whole adapter set wires and all is in the toe of this boot but you cannot see it. Whether that was what he used or not who can say. Usually pre 1940 though probably.

27051. RE: [regenrx] 304TL seen in major movie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-25 20:11:49 UTC
From: Hubert Miller
Topic: 27021 Message: 27051

I’m always interested in leads to check out in the general topic of clandestine-spy radio or prison camp radio and such.

I read somewhere that a movie of the book “They Fought Alone” is in the works – about the stay-behinds who hid out

from the Japanese in the Philippine Islands. If such a movie does come out i sure hope the communications aspects are

not totally unrealistic.

I had forgot that the German embassy could be the relay station at least into December 1941. After that, i still am puzzled

as to how Gimpel’s transmitter and random wire antenna in the big city could reach Hamburg. A U-boat could possibly

relay, but his transmit times would have to be somehow coordinated with the U-boat, and he could not be expected to

easily meet prearranged schedules.

-H

27052. Re: [regenrx] 304TL seen in major movie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-25 21:55:31 UTC
From: john ruccolo
Topic: 27021 Message: 27052

Around 25:00 for the Germans and 1 hour 17 min for the Feds.

In shadowy lighting these could be mistaken for the more-common HF sets, SX-24 or 25.

Sent from my CRM-114

> On Sep 25, 2016, at 1:02 PM, Hubert Miller kargo_cult@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
> Do you recall which scene or location showed the VHF receiver?
>
>
>
> >I had to take a look. It's a very good "yarn," as they used to say. And at least one of those Hallicrafters sets is one of their lesser-known VHF AM/FM sets, either an S-27 or S-36. It looks like both the FBI and the Germans >had one!
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> >Posted by: john ruccolo <jr6v6gt@...>
>
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> BTW, if one cares to read such stories, there’s a book “Agent 146” that’s pretty interesting. Erich Gimpel and a turncoat American were landed from a U-boat
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> viewpoint. He was constantly on guard and always in fear that some little clue, like his unfamiliarity with American restaurants or some hint of an accent would
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> give him away. At some point he found love with an American woman but he had to keep his secrets from her too, and eventually he had sadly to just
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> disappear from her. Eventually he was captured and sentenced to death, but due to an obscure law forbidding executions during the official mourning period
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> Unfortunately the book has absolutely minimal details about his radio procedure. No

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> for his transmitter, and is wracked by fear that even this will give him away. It occurred to me that he probably arrived with only the crystals he needed and the
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> telegraph key, which might be suspect items to be shopping for, in 1944 U.S.A. Buying a shortwave receiver would be another challenge and also probably one
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> to build something like like the 'adapter set' Don mentioned which plugged into a receiver's output socket. You have to wonder how he could expect to reach
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> Germany reliably using makeshift antennas from New York city locations. Unfortunately that information is now lost; apparently Gimpel passed away in 2010.
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> The "Agent 146" book is a republishing of the earlier book "Spy for Germany" and is available in paperback at low prices.
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> There was a movie made about the Gimpel story, "Spion Fuer Deutschland", which i recently ordered, along with "KLK an ZTX" ("KLK calling ZTX") about the
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> PAL format, which means a learning curve for me and a bunch of steps i don't relish, to convert it.
>
> -Hue Miller
>
>
>
>

27053. RE: [regenrx] 304TL seen in major movie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-26 14:37:00 UTC
From: dulmagedon@...
Topic: 27021 Message: 27053

I was advised by a clandestine radio expert in Germany to read the book Two Eggs on my Plate by Olaf Olsen. He said even though it was about an Allied spy it would give me excellant insite into how these type of agents operated and what they reported on. Shipping traffic was the no 1 info (which is why they were here as it goes right by in plain sight heading for the Atlantic and points along that route.) Schedule and freq is already carved in stone and sending the data seemed to be the priority. I don;t know if I would use the term relay station for any of them. I think that was where the message stopped and started , especially the Embassy one. The article said as late as 1945 it was still operational. Anyway here are two of the links Carl gave me.
https://www.cia.gov/library/ center-for-the-study-of- intelligence/kent-csi/vol4no2/ html/v04i2a05p_0001.htm https://www.google.com/url?q=https%3A%2F%2Fwww.cia.gov%2Flibrary%2Fcenter-for-the-study-of-intelligence%2Fkent-csi%2Fvol4no2%2Fhtml%2Fv04i2a05p_0001.htm&sa=D&sntz=1&usg=AFQjCNF6O1o3qag5kbW59g-hZsbbEmsRWQ
}> Pdf copy.. >> Redirecting https://www.google.com/url?q=https%3A%2F%2Fwww.cia.gov%2Flibrary%2Fcenter-for-the-study-of-intelligence%2Fkent-csi%2Fvol4no2%2Fpdf%2Fv04i2a05p.pdf&sa=D&sntz=1&usg=AFQjCNFeANVnzy3SJ1QMR4sn8_Si7eEbCQ

Redirecting https://www.google.com/url?q=https%3A%2F%2Fwww.cia.gov%2Flibrary%2Fcenter-for-the-study-of-intelligence%2Fkent-csi%2Fvol4no2%2Fpdf%2Fv04i2a05p.pdf&sa=D&sntz=1&usg=AFQjCNFeANVnzy3SJ1QMR4sn8_Si7eEbCQ Redirecting you to https://www.cia.gov/library/center-for-the-study-of-intelligence/kent-csi/vol4no2/pdf/v04i2a05p.pdf

View on www.google.com https://www.google.com/url?q=https%3A%2F%2Fwww.cia.gov%2Flibrary%2Fcenter-for-the-study-of-intelligence%2Fkent-csi%2Fvol4no2%2Fpdf%2Fv04i2a05p.pdf&sa=D&sntz=1&usg=AFQjCNFeANVnzy3SJ1QMR4sn8_Si7eEbCQ
Preview by Yahoo

27054. RE: [regenrx] 304TL seen in major movie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-26 17:29:26 UTC
From: Hubert Miller
Topic: 27021 Message: 27054

Don – thanks for the link to the interesting doc.

My comments:

Embassies were closed shortly after declaration of war and embassy staffs were returned on neutral country ships.
There are 2 editions of “Two Eggs on My Plate”. The earlier edition has photos showing the “Paraset” in operation. (So this discussion DOES relate to regens, as the

Paraset receiver was 2x 6SK7 if i remember correctly.)

The CIA doc in the link below doesn’t mention the Erich Gimpel (“Agent 146”) story. I think at that time, 1944, there were maybe no more ways to get mail to

Germany, or they realized that any mail via a neutral country would be inspected, so maybe that’s why they tried radio again.

-H

> was advised by a clandestine radio expert in Germany to read the book Two Eggs on my Plate by Olaf Olsen. He said even though it was about an Allied spy it would give me excellant insite into how these type of agents operated and what they reported on. Shipping traffic was the no 1 info (which is why they were here as it goes right by in plain sight heading for the Atlantic and points along that route.) Schedule and freq is already carved in stone and sending the data seemed to be the priority. I don;t know if I would use the term relay station for any of them. I think that was where the message stopped and started , especially the Embassy one. The article said as late as 1945 it was still operational. Anyway here are two of the links Carl gave me.

https://www.google.com/url?q=https%3A%2F%2Fwww.cia.gov%2Flibrary%2Fcenter-for-the-study-of-intelligence%2Fkent-csi%2Fvol4no2%2Fhtml%2Fv04i2a05p_0001.htm&sa=D&sntz=1&usg=AFQjCNF6O1o3qag5kbW59g-hZsbbEmsRWQ

}> Pdf copy.. >> https://www.google.com/url?q=https%3A%2F%2Fwww.cia.gov%2Flibrary%2Fcenter-for-the-study-of-intelligence%2Fkent-csi%2Fvol4no2%2Fpdf%2Fv04i2a05p.pdf&sa=D&sntz=1&usg=AFQjCNFeANVnzy3SJ1QMR4sn8_Si7eEbCQ

Posted by: dulmagedon@yahoo.ca

27055. RE: [regenrx] 304TL seen in major movie

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-26 19:57:54 UTC
From: dulmagedon@...
Topic: 27021 Message: 27055

You are welcome Hue,
I had a look at another site but didn't save it. This info came from my friend Carl Gregory. If I remember the other one I will just tag it on the end of a post with HM after it.
Yes I understand that from your perspective however remember that for us in VE land the war was going since 1939 so what would be closed when you entered was very active when we were first involved. In fact my Dad got his notice in 1939. how I got into this was a German fellow showed up here in our county kind of out of the blue late 1936. he hung around my grandparents farm and was friends with my family. He was murdered in 1939. I was digging into his life a bit and discovered he was considered a war hero in his hometown and that German immigrants who came many years later knew all about him. The more I dig the more suspicious I become. And to be honest if he was just reporting on shipping and such pre 1939 that would not have even been illegal. There is an awful lot more to that story then I can tell here.
re Oluf Olsen Yes the copy I have of the Two Eggs has the Paraset in it. My friend Jim VE3DCX has a paraset as does T Hoeppe in Germany. After building the last transceiver which was inspired by the Weskit BN1 but is not tat circuit and seeing how well it worked both TX and Regen I went looking for one tube spy radios and that is how I stumbled onto the Adapter Set. And that started the "what was he doing here" question and it snowballed from there. I have fooled around quite a bit with listening for the regen on a nearby RX. Different circuits show quite a difference in telltale signals. It is surprising how much difference. Some you could run right nder someones nose and they might not find it even when listening to CW. others would get you killed back in the day under any condition. Anyway interesting subjects. Big interest in clandestine stuff all of the sudden.
donVe3LYX

27056. cheap audio chips

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-27 21:18:58 UTC
From: msalbert@...
Topic: 27056 Message: 27056

Spotted this today, IIRC someone here was working on regen kits for kids, needing low cost audio amplifiers . . . seems like a good deal so may be useful

http://www.goldmine-elec-products.com/prodinfo.asp?number=G21097&mc_cid=d1014cf2fc&mc_eid=073d97384e

17 cents each! However the part appears to be a bit of a power hog (quiescent current is 40 to 55mA) so may not be too suitable for a 9V battery operated set.

I've no interest in the vendor, just a satisfied customer.

Regards,
Mark KB9VKE

27057. Re: [regenrx] cheap audio chips

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-27 23:11:53 UTC
From: Leonard Meek
Topic: 27056 Message: 27057

That's Electronics Goldmine. They're pretty good. I've bought a lot of stuff from them. Another one is Dan's Small Parts, though he's not as easy to deal with. There's not as many surplus dealers as there once was.

Leonard

----- Original Message -----
From: msalbert@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Tuesday, September 27, 2016 11:18 AM
Subject: [regenrx] cheap audio chips

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27058. Re: [regenrx] cheap audio chips KA2206, 2.3Watt Stereo Power Amplifier IC not so Cheap and SMD

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-28 00:41:39 UTC
From: Rob
Topic: 27056 Message: 27058

thanks for the heads up....but that
KA2206, 2.3Watt Stereo Power Amplifier IC... at $4 is not so cheap and
it is SMD
which I consider to be a big NO-NO when playing with newbies.
Also... it IS stereo.

I can stick with $1 LM386 amp kits and also TDA2030A kits......
EBAY:
TDA2030A Electronic Audio Power Amplifier Board Module Mono 18W DC 9-24V
DIY Kit
costs $1.60 and is VERY LOUD.... presentation... auditorium.. loud...
running on two 9 volt batteries in series.

So I have found headphone, desktop, and presentation amplification can
be done for $1.60 or less.

On 09/27/2016 07:11 PM, 'Leonard Meek' lemeek@... [regenrx]
wrote:
>
> □
>
> That's Electronics Goldmine. They're pretty good. I've bought a lot of
> stuff from them. Another one is Dan's Small Parts, though he's not as
> easy to deal with. There's not as many surplus dealers as there once was.
> Leonard
>
> ----- Original Message -----
> *From:* msalbert@... [regenrx]
> <mailto:msalbert@...%20[regenrx]>
> *To:* regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>
> *Sent:* Tuesday, September 27, 2016 11:18 AM
> *Subject:* [regenrx] cheap audio chips
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> 17 cents each! However the part appears to be a bit of a power
> hog (quiescent current is 40 to 55mA) so may not be too suitable
> for a 9V battery operated set.
> I've no interest in the vendor, just a satisfied customer.
> Regards,
> Mark KB9VKE
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>

27059. Arnie's transistors were rejected and send back to USA

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-28 15:55:21 UTC
From: Rob
Topic: 27059 Message: 27059

Arnie's transistors were rejected and send back to USA
http://www.learnmorsecode.com/arnie/index.html

27060. Re: [regenrx] cheap audio chips KA2206, 2.3Watt Stereo Power Amplifier IC not so Cheap and SMD

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-28 16:25:26 UTC
From: msalbert@...
Topic: 27056 Message: 27060

Sorry I didn't notice they were SMD (looked so big in the picture!). For $4 you do get 24 chips so the cost is low. But being SMD and too much power, yup probably not suitable for your application . . .

Regards,
Mark KB9VKE

-----Original Message-----
From: Rob roomberg@... [regenrx] <regenrx@yahoogroups.com>
To: regenrx <regenrx@yahoogroups.com>
Sent: Tue, Sep 27, 2016 7:41 pm
Subject: Re: [regenrx] cheap audio chips KA2206, 2.3Watt Stereo Power Amplifier IC not so Cheap and SMD

thanks for the heads up....but that
KA2206, 2.3Watt Stereo Power Amplifier IC... at $4 is not so cheap and it is SMD
which I consider to be a big NO-NO when playing with newbies.
Also... it IS stereo.

I can stick with $1 LM386 amp kits and also TDA2030A kits......
EBAY:
TDA2030A Electronic Audio Power Amplifier Board Module Mono 18W DC 9-24V DIY Kit
costs $1.60 and is VERY LOUD.... presentation... auditorium.. loud... running on two 9 volt batteries in series.

So I have found headphone, desktop, and presentation amplification can be done for $1.60 or less.

On 09/27/2016 07:11 PM, 'Leonard Meek' lemeek@... [regenrx] wrote:

☐

That's Electronics Goldmine. They're pretty good. I've bought a lot of stuff from them. Another one is Dan's Small Parts, though he's not as easy to deal with. There's not as many surplus dealers as there once was.

Leonard

----- Original Message -----

From: msalbert@... [regenrx]

To: regenrx@yahoogroups.com

Sent: Tuesday, September 27, 2016 11:18 AM

Subject: [regenrx] cheap audio chips

Spotted this today, IIRC someone here was working on regen kits for kids, needing low cost audio amplifiers . . . seems like a good deal so may be useful

http://www.goldmine-elec-products.com/prodinfo.asp?number=G21097&mc_cid=d1014cf2fc&mc_eid=073d97384e

17 cents each! However the part appears to be a bit of a power hog (quiescent current is 40 to 55mA) so may not be too suitable for a 9V battery operated set.

I've no interest in the vendor, just a satisfied customer.

Regards,

Mark KB9VKE

27061. Re: [regenrx] Arnie's transistors were rejected and send back to USA

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-28 16:32:43 UTC
From: msalbert@...
Topic: 27059 Message: 27061

years ago my folks tried to send me a birthday present of Oreos (my fav) to me when I was in Indonesia.
It was also refused . . . the package was returned to them after several months.

Regards,
Mark KB9VKE

-----Original Message-----
From: Rob roomberg@... [regenrx] <regenrx@yahoogroups.com>
To: regenrx <regenrx@yahoogroups.com>
Sent: Wed, Sep 28, 2016 10:55 am
Subject: [regenrx] Arnie's transistors were rejected and send back to USA

Arnie's transistors were rejected and send back to USA
http://www.learnmorsecode.com/arnie/index.html

27062. Re: [regenrx] Arnie's transistors were rejected and send back to USA

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-28 17:01:43 UTC
From: Cecil Bayona
Topic: 27059 Message: 27062

On 9/28/2016 10:55 AM, Rob roomberg@... [regenrx] wrote:
>
>
> Arnie's transistors were rejected and send back to USA
> http://www.learnmorsecode.com/arnie/index.html
>
>
> ---
> Posted by: Rob <roomberg@...>
> ---
There is still an embargo of electronic goods to Cuba, you need to be
patient until it's lifted, it will not be long as they are setting up
ambassadors soon.

--
Cecil - k5nwa
http://thepartsplace.k5nwa.com/

27063. RE: [regenrx] Arnie's transistors were rejected and send back to USA

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-28 17:18:26 UTC
From: Hubert Miller
Topic: 27059 Message: 27063

Looks like a pretty nice parts package!
Now, are you sure this was rejected by the U.S.P.S. ?
I ask, because the form to the right doesn’t look to me like a U.S. form, and it’s only in Spanish and French.
Odd, isn’t it? It’s actually easier, less red tape, to travel to DPRK than Cuba, and DPRK is a scary place.
-Hue

27064. Re: [regenrx] Arnie's transistors were rejected and send back to USA

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-28 20:50:00 UTC
From: Rob
Topic: 27059 Message: 27064

Have we got any BETTER channel NOW...right now without waiting......
like can ANY OF YOU GUYS IN CANADA legally mail my envelope to Arnie?

On 09/28/2016 01:01 PM, Cecil Bayona cecil.bayona@... [regenrx] wrote:
>
> On 9/28/2016 10:55 AM, Rob roomberg@... [regenrx] wrote:
> >
> >
> > Arnie's transistors were rejected and send back to USA
> > http://www.learnmorsecode.com/arnie/index.html
> >
> >
> > ----------
> > Posted by: Rob <roomberg@...>
> > ----------
> There is still an embargo of electronic goods to Cuba, you need to be
> patient until it's lifted, it will not be long as they are setting up
> ambassadors soon.
>
> --
> Cecil - k5nwa
> http://thepartsplace.k5nwa.com/
>
>

27065. Re: [regenrx] Arnie's transistors were rejected and send back to USA

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-28 21:26:36 UTC
From: katz.ajamas@...
Topic: 27059 Message: 27065

Was the package returned by USPS or Cuba post? USPS and USCFR have info on the required paperwork for stuff sent to Cuba.
Requirements differ for commercial and personal goods so it's important to be clear in the description.

73, -Bob ah7i

27066. Re: Arnie's transistors were rejected and send back to USA

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-28 21:28:37 UTC
From: les.au49@...
Topic: 27059 Message: 27066

I sent a package (a few HC-49 crystals) to Arnie at the beginning of the year.
It arrived after 3 months. I live in Australia.

Before this I wrote (ordinary letter) but I think my letter was dumped or lost.
It didn't arrive.

I sent the package of crystals as a "letter", not a parcel.

Les

27067. Re: cheap audio chips

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-28 21:39:10 UTC
From: les.au49@...
Topic: 27056 Message: 27067

I bought several LM386 modules from eBay.
I got two 'styles'. In one, the volume control is a trim (screwdriver) pot.
The second had a conventional volume pot, a 3.5mm jack (for input) and a DC power connector.

I haven't tested the second item, but looking at the board I suspect the (volume) pot works in "reverse" ie CW is minimum volume.

I wanted to see how much power I needed to drive a speaker.
Answer: It depends on the size of the speaker!
Small speakers are inefficient. The results below refer to a 10 inch speaker 'rescued' from an electronic organ.

LM386 amplifier module. Sensitivity.
Using a "large" spkr (eg 10 inch)

Signal to speaker.
30mV use-able output in approx 100uW
quiet conditions

60mV listening in bed volume 500uW

90mV quite useable volume 1mW

200mV loud enough to hear across 5mW
the room when no other noise.

400mV loud enough to use 20mW
on the work-bench.

500mV reference level. 30mW
700mV reference level 60mW

Using a small speaker (from a PC) I got no use-able sound below 100mV.

27068. Re: cheap audio chips SPEAKERS are NOT created EQUAL

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-28 22:23:52 UTC
From: Rob
Topic: 27056 Message: 27068

All of my speaker experiments were done with loose speakers, nothing in
a mounting or cabinet.

I do not have numbers like you Les but I have had some very interesting
revelations here about
multiple speakers.

The goal being to come up with something for the kids to build I bought
cheap 8 ohm 3 inch speakers from
ebay....4 different kinds , then built an amplifier.. and hard wired
the speaker:
http://www.learnmorsecode.com/amp/tl431PCBdone1.jpg

I did this with two different designs

http://www.learnmorsecode.com/amp/tl431.html

and then
resorted to using wire wrap pins as plug posts instead of using up the
speaker supply here.

I really was surpised at how quiet these speakers were.... so I swapped
out the speakers where I built pin instead of hard wired speakers.....
and found that no two speakers sounded the same
and all were unacceptably low volume..... would be fine for
headphones... but not for desk top audio.

My REAL problem was that all of my amplifiers really need to be having a
high impedance buffer between my experimental amplifier circuits and the
716 regen circuit and they all really did come to life once I added the
darlington pre-amp circuit......

BUT
talking about speakers here......
even after I did add the darlington I ran through the same audio tests
and concluded that
the 3 inch speakers really did suck compared to using a 10 inch speaker.

So then I tried a few high end speakers.... car steareo speakers.... and
they didn't sound any good at all.....
not nearly as loud as the simple Radio Shack 8 ohm speaker meant to be
used in a bookshelf speaker.

This lead me to believe that all of my tiny 3 inch speakers need
something... perhaps some more research will reveal
circuit errors I made ......
or not....

because the large speaker sounds great.

My amplifier circuits were a variety from scratch built LM386 and
descrete components .....

I didn't just use an LM386 kit.

On 09/28/2016 05:39 PM, les.au49@... [regenrx] wrote:
>
> I bought several LM386 modules from eBay.
> I got two 'styles'. In one, the volume control is a trim
> (screwdriver) pot.
> The second had a conventional volume pot, a 3.5mm jack (for input) and
> a DC power connector.
>
> I haven't tested the second item, but looking at the board I suspect
> the (volume) pot works in "reverse" ie CW is minimum volume.
>
> I wanted to see how much power I needed to drive a speaker.
> Answer: It depends on the size of the speaker!
> Small speakers are inefficient. The results below refer to a 10 inch
> speaker 'rescued' from an electronic organ.
>
> LM386 amplifier module. Sensitivity.
> Using a "large" spkr (eg 10 inch)
>
> Signal to speaker.
> 30mV use-able output in approx 100uW
> quiet conditions
>
> 60mV listening in bed volume 500uW
>
> 90mV quite useable volume 1mW
>
> 200mV loud enough to hear across 5mW
> the room when no other noise.
>
> 400mV loud enough to use 20mW
> on the work-bench.
>
> 500mV reference level. 30mW
> 700mV reference level &n bsp; 60mW
>
> Using a small speaker (from a PC) I got no use-able sound below 100mV.
>
> _

27069. Re: [regenrx] Re: Arnie's transistors were rejected and send back to USA

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-28 22:26:12 UTC
From: Rob
Topic: 27059 Message: 27069

I sent a package of 7.16 ceramic resonators to Arnie which he DID receive
so I figured I'd step up the envelope size to this transistor package.

On 09/28/2016 05:28 PM, les.au49@... [regenrx] wrote:
>
> I sent a package (a few HC-49 crystals) to Arnie at the beginning of
> the year.
> It arrived after 3 months. I live in Australia.
>
> Before this I wrote (ordinary letter) but I think my letter was dumped
> or lost.
> It didn't arrive.
>
> I sent the package of crystals as a "letter", not a parcel.
>
> Les
>
>

27070. Re: [regenrx] Arnie's transistors were rejected and send back to USA

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-29 02:28:47 UTC
From: michael mason
Topic: 27059 Message: 27070

Uk citizens have posted electronic components to Cuban nationals as gifts.
Maybe this is a viable option?

> On 28 Sep 2016, at 21:50, Rob roomberg@ptd.net [regenrx] <regenrx@yahoogroups.com>
wrote:
>
> Have we got any BETTER channel NOW...right now without waiting......
> like can ANY OF YOU GUYS IN CANADA legally mail my envelope to Arnie?
>
>
>> On 09/28/2016 01:01 PM, Cecil Bayona cecil.bayona@... [regenrx] wrote:
>>
>> On 9/28/2016 10:55 AM, Rob roomberg@... [regenrx] wrote:
>> >
>> >
>> > Arnie's transistors were rejected and send back to USA
>> > http://www.learnmorsecode.com/arnie/index.html
>> >
>> >
>> > ----------
>> > Posted by: Rob <roomberg@...>
>> > ----------
>> There is still an embargo of electronic goods to Cuba, you need to be
>> patient until it's lifted, it will not be long as they are setting up
>> ambassadors soon.
>>
>> --
>> Cecil - k5nwa
>> http://thepartsplace.k5nwa.com/
>
>

27071. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-29 12:29:49 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 27071

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /s-1014 3.6 - 7MHz REGEN 5 ONTV.BMP
Uploaded by : jorschei <kthkit@...>
Description : Expiremental proposal of an regen receiver 3.6 MHz by KTH rf Design ex PE1KTH

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/s-1014%203.6%20-%207MHz%20REGEN%205%20ONTV.BMP

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

jorschei <kthkit@...>

27072. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-29 12:31:44 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 27072

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /TOP COPPER 3.6-7 MHz REGEN RECEIVER.BMP
Uploaded by : jorschei <kthkit@...>
Description : PCB layout top copper

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/TOP%20COPPER%20%203.6-7%20MHz%20REGEN%20RECEIVER.BMP

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

jorschei <kthkit@...>

27073. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-29 12:42:33 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 27073

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /BOTTOM COPPER 3.6-7 MHz REGEN RECEIVER.BMP
Uploaded by : jorschei <kthkit@...>
Description : Bottom PCB layout

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/BOTTOM%20COPPER%20%203.6-7%20MHz%20REGEN%20RECEIVER.BMP

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

jorschei <kthkit@...>

27074. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-29 12:43:37 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 27074

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /F-1014 - FRONT 3.6 - 7MHz REGEN 5.BMP
Uploaded by : jorschei <kthkit@...>
Description : Front sticker bimbox housing

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/F-1014%20-%20FRONT%203.6%20-%207MHz%20REGEN%205.BMP

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

jorschei <kthkit@...>

27075. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-29 12:44:42 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 27075

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /IMG_2586.JPG
Uploaded by : jorschei <kthkit@...>
Description : Bimbox housing Regen receiver 3.6 MHz

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/IMG_2586.JPG

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

jorschei <kthkit@...>

27076. RE: Cheap Audio Chips

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-29 23:50:21 UTC
From: Bry Carling
Topic: 27076 Message: 27076

Why are you bothering with chips at all?

You can buy a complete amplifier ready to go in a small package, usually with a volume control included, for a buck or two on eBay. Generally these are more up to date and will sound a LOT better than those LM380 and LM386 noise makers that most QRP home brewers tend to love. Add power and speaker and you are good to go.
No muss, no fuss. I bought several of them in the past year and all work great.

73 - Bry AF4K
Posted by: msalbert@... kb9vke
Date: Tue Sep 27, 2016 2:24 pm ((PDT))

Spotted this today, IIRC someone here was working on regen kits for kids, needing low cost audio amplifiers . . . seems like a good deal so may be useful

http://www.goldmine-elec-products.com/prodinfo.asp?number=G21097&mc_cid=d1014cf2fc&mc_eid=073d97384e

17 cents each! However the part appears to be a bit of a power hog (quiescent current is 40 to 55mA) so may not be too suitable for a 9V battery operated set.

I've no interest in the vendor, just a satisfied customer.

Regards,
Mark KB9VKE

27077. Re: [regenrx] RE: Cheap Audio Chips

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-30 01:03:29 UTC
From: Rob
Topic: 27076 Message: 27077

WHICH did you buy?

I have 8 different complete amplifiers... all SMD... not kits.... some
are mono...some are stereo...
that I bought to experiment with their usefulness and feasibilty of
newbie radio applications.

As you said...
Add power and speaker and you are good to go. No muss, no fuss.

BUT
I wanted to find something that was simple enough for the kids while
giving enough hands
on experience for them to "own" it..... not just be another mystery box
appliance they got as a gift like their
smartphones that they don't test or probe with meters or scopes.

The $1 LM386 kits are through hole components so there is no SMD crumbs
to lose.

On 09/29/2016 07:50 PM, Bry Carling af4k@... [regenrx] wrote:
>
> Why are you bothering with chips at all?
>
> You can buy a complete amplifier ready to go in a small package,
> usually with a
> volume control included, for a buck or two on eBay. Generally these
> are more up to
> date and will sound a LOT better than those LM380 and LM386 noise
> makers that most
> QRP home brewers tend to love. Add power and speaker and you are good
> to go.
> No muss, no fuss. I bought several of them in the past year and all
> work great.
>
> 73 - Bry AF4K
>
> Posted by: msalbert@... kb9vke
> Date: Tue Sep 27, 2016 2:24 pm ((PDT))
>
>
> Spotted this today, IIRC someone here was working on regen kits for kids,
> needing low cost audio amplifiers . . . seems like a good deal so may be
> useful
>
> http://www.goldmine-elec-products.com/prodinfo.asp?number=G21097&mc_cid=d1014cf2fc&mc_ei

d=073d97384e
>
> 17 cents each! However the part appears to be a bit of a power hog
> (quiescent current is 40 to 55mA) so may not be too suitable for a 9V
> battery operated set.
>
> I've no interest in the vendor, just a satisfied customer.
>
> Regards,
> Mark KB9VKE
>

27078. 400 volt zener power supply for geiger tube

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-30 19:23:54 UTC
From: Rob
Topic: 27078 Message: 27078

I stumbled onto geiger tubes and instructables.com instructions
how to build power supplies for these geiger tubes.....

the PDFs:
Simplest Geiger Counter
by tanner_tech on September 8, 2016

and

Homemade Geiger Counter
by electric_piano_5k on March 15, 2011

picture of geiger tube:
http://www.learnmorsecode.com/geiger/geiger.jpg

Its not that I require any geiger counter right now to detect anything
nuclear......

MY INTEREST in these circuits is that they both describe build a battery
operated
power supply out of a 555 timer pulsing a transformer to get 1,000 volts
and then
using 100 volt zener diodes stacked to create a 400 volt voltage drop
across the
zener which is then fed into the geiger tube.,,,,,, requiring very
little... 10? miliamps.

sooooooo..... just wondering.....
is it feasible to use this method to make 100 volts for regen tube
receiver circuits?

Two schematics here:
http://www.learnmorsecode.com/geiger/geiger2.jpg

this one is fuzzy
http://www.learnmorsecode.com/geiger/geiger4.jpg

now....along those lines..... I build a circuit from a FOREST MIMS book
about 30 years ago
that ran on a 9 volt battery and made 220 volts:
this circuit:
http://www.learnmorsecode.com/geiger/hv.jpg

Is it so farfetched to think this type of circuit can power a vaccuum
tube receiver by adding
the zeners and some smoothing capacitors?

27079. Re: [regenrx] 400 volt zener power supply for geiger tube

Yahoo group: regenrx (2016 — 2017)
Date: 2016-09-30 23:16:29 UTC
From: Will Kimber
Topic: 27078 Message: 27079

Hi,

Why the need for zener diodes? Unless you want ultra stable or specific voltage just smoothing the pulses with RC combination would probably do for Rx H.T.

Will

On 10/01/2016 08:23 AM, Rob roomberg@... [regenrx] wrote:
>
> I stumbled onto geiger tubes and instructables.com instructions
> how to build power supplies for these geiger tubes.....
>
> the PDFs:
> Simplest Geiger Counter
> by tanner_tech on September 8, 2016
>
> and
>
> Homemade Geiger Counter
> by electric_piano_5k on March 15, 2011
>
> picture of geiger tube:
> http://www.learnmorsecode.com/geiger/geiger.jpg
>
> Its not that I require any geiger counter right now to detect anything
> nuclear......
>
> MY INTEREST in these circuits is that they both describe build a
> battery operated
> power supply out of a 555 timer pulsing a transformer to get 1,000
> volts and then
> using 100 volt zener diodes stacked to create a 400 volt voltage drop
> across the
> zener which is then fed into the geiger tube.,,,,,, requiring very
> little... 10? miliamps.
>
> sooooooo..... just wondering.....
> is it feasible to use this method to make 100 volts for regen tube
> receiver circuits?
>
> Two schematics here:
> http://www.learnmorsecode.com/geiger/geiger2.jpg
>
> this one is fuzzy
> http://www.learnmorsecode.com/geiger/geiger4.jpg

>
> now....along those lines..... I build a circuit from a FOREST MIMS
> book about 30 years ago
> that ran on a 9 volt battery and made 220 volts:
> this circuit:
> http://www.learnmorsecode.com/geiger/hv.jpg
>
> Is it so farfetched to think this type of circuit can power a vaccuum
> tube receiver by adding
> the zeners and some smoothing capacitors?
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27080. Re: [regenrx] 400 volt zener power supply for geiger tube

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-01 02:23:45 UTC
From: Rob
Topic: 27078 Message: 27080

I'm not real clear on what this sentence means:
smoothing the pulses with RC combination would probably do for Rx H.T.

On 09/30/2016 07:16 PM, Will Kimber zl1tao@... [regenrx] wrote:
>
> Hi,
>
>
> Why the need for zener diodes? Unless you want ultra stable or
> specific voltage just smoothing the pulses with RC combination would
> probably do for Rx H.T.
>
>
> Will
>
>
> On 10/01/2016 08:23 AM, Rob roomberg@... [regenrx] wrote:
>>
>> I stumbled onto geiger tubes and instructables.com instructions
>> how to build power supplies for these geiger tubes.....
>>
>> the PDFs:
>> Simplest Geiger Counter
>> by tanner_tech on September 8, 2016
>>
>> and
>>
>> Homemade Geiger Counter
>> by electric_piano_5k on March 15, 2011
>>
>> picture of geiger tube:
>> http://www.learnmorsecode.com/geiger/geiger.jpg
>>
>> Its not that I require any geiger counter right now to detect
>> anything nuclear......
>>
>> MY INTEREST in these circuits is that they both describe build a
>> battery operated
>> power supply out of a 555 timer pulsing a transformer to get 1,000
>> volts and then
>> using 100 volt zener diodes stacked to create a 400 volt voltage drop
>> across the
>> zener which is then fed into the geiger tube.,,,,,, requiring very
>> little... 10? miliamps.
>>

>> soooooooo..... just wondering.....
>> is it feasible to use this method to make 100 volts for regen tube
>> receiver circuits?
>>
>> Two schematics here:
>> http://www.learnmorsecode.com/geiger/geiger2.jpg
>>
>> this one is fuzzy
>> http://www.learnmorsecode.com/geiger/geiger4.jpg
>>
>> now....along those lines..... I build a circuit from a FOREST MIMS
>> book about 30 years ago
>> that ran on a 9 volt battery and made 220 volts:
>> this circuit:
>> http://www.learnmorsecode.com/geiger/hv.jpg
>>
>> Is it so farfetched to think this type of circuit can power a vaccuum
>> tube receiver by adding
>> the zeners and some smoothing capacitors?
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27081. Re: [regenrx] 400 volt zener power supply for geiger tube

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-01 10:04:49 UTC
From: Will Kimber
Topic: 27078 Message: 27081

The normal RCRC combination used after any rectifier circuit.

Something like a 47 ohm R to limit the current through the rectifier.
then a 10 or 22 micro farad 600volt Electrolytic capacitor. Follow with
another similar stage, with probably a bigger resistor depending on how
much voltage you have to spare. it would further reduce the ripple from
the sharp spikes that pulse transformers produce.

Depending on the frequency of the pulses it might be possible to reduce
the value of the capacitors. Either or both resistors could be replaced
by a choke. It would not need to be as big as would be used or 50 or 60
hertz.

The only thing the zeners do is stabilize the output voltage at the
expense of using a few milliamps of current. It is not usual to run
recievers off a stabilized supply apart from maybe the oscillator circuits.

Most radio electronic handbooks would have information on rectifying and
smoothing power supplies. You would need to adjust the capacitance
values to take into account the higher frequency. Something like an old
vibrator auto radio supply would be similar.

Cheers,

Will

On 10/01/2016 03:23 PM, Rob roomberg@... [regenrx] wrote:
>
> I'm not real clear on what this sentence means:
> smoothing the pulses with RC combination would probably do for Rx H.T.
>
>
>
>
>
>
> On 09/30/2016 07:16 PM, Will Kimber zl1tao@... [regenrx] wrote:
>>
>> Hi,
>>
>>
>> Why the need for zener diodes? Unless you want ultra stable or
>> specific voltage just smoothing the pulses with RC combination would
>> probably do for Rx H.T.
>>
>>
>> --

>> .
>
>

27082. Re: [regenrx] 400 volt zener power supply for geiger tube

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-01 16:04:58 UTC
From: msalbert@...
Topic: 27078 Message: 27082

Hi Rob, most GM tubes don't require much current, a few microamps maybe. Very roughly, they are "charged up" like a capacitor, then discharged by the radiation. That discharge is passed through a high-value resistor, then amplified to make the characteristic "clicking" sound. So HV current needs are very low; for most GM power supplies even a DMM will be too much load and crash it. One circuit you mentioned uses a push button to generate HV pulses to charge up the GM tube, which can then operate for quite a while. The Boys' Second Book of Radio and Electronics by Alfred Morgan has a project How to Make a Geiger Counter for less than $15 (1957) used the same HV technique. He says it "proved sensitive enough to detect the radioactive fallout which reached New York City from atomic bomb tests in Utah". I found a brief description of it here.
http://covingtoninnovations.com/michael/blog/0408/index.html

Probably there are a some GM tube HV supplies which are overbuilt and can do what you want. I've had good luck with nixie tube power supplies; several watts of power are possible in a few square inches. Depending on the design some extra effort will probably be needed to make them suitable for radio use. The inductor is a major source of RFI; changing to a toroid helps. One prebuilt module used an unsuitable electrolytic filter capacitor; it ran warm. Changing to a film type fixed it. I have not tried them with regens; maybe you'd need extra effort like shielding and feed-thru caps to get the switching noise down.

Regards,
Mark KB9VKE

-----Original Message-----
From: Rob roomberg@... [regenrx] <regenrx@yahoogroups.com>
To: regenrx <regenrx@yahoogroups.com>
Sent: Fri, Sep 30, 2016 2:24 pm
Subject: [regenrx] 400 volt zener power supply for geiger tube

I stumbled onto geiger tubes and instructables.com instructions
how to build power supplies for these geiger tubes.....

the PDFs:
Simplest Geiger Counter
by tanner_tech on September 8, 2016

and

Homemade Geiger Counter
by electric_piano_5k on March 15, 2011

picture of geiger tube:
http://www.learnmorsecode.com/geiger/geiger.jpg

Its not that I require any geiger counter right now to detect anything nuclear......

MY INTEREST in these circuits is that they both describe build a battery operated power supply out of a 555 timer pulsing a transformer to get 1,000 volts and then using 100 volt zener diodes stacked to create a 400 volt voltage drop across the zener which is then fed into the geiger tube.,,,,,, requiring very little... 10? miliamps.

soooooooo..... just wondering.....
is it feasible to use this method to make 100 volts for regen tube receiver circuits?

Two schematics here:
http://www.learnmorsecode.com/geiger/geiger2.jpg

this one is fuzzy
http://www.learnmorsecode.com/geiger/geiger4.jpg

now....along those lines..... I build a circuit from a FOREST MIMS book about 30 years ago that ran on a 9 volt battery and made 220 volts:
this circuit:
http://www.learnmorsecode.com/geiger/hv.jpg

Is it so farfetched to think this type of circuit can power a vaccuum tube receiver by adding
the zeners and some smoothing capacitors?

27083. NRR 2017 p rogress☐

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-01 17:33:58 UTC
From: Bry Carling
Topic: 27083 Message: 27083

2017 Novice Rig Roundup progress

Good news - ads are going into a lot of the major ham magazines.

The rules have been updated for 2017 to incorporate most of the requested changes.

The FAQ changes will be under way today.

The WEB BASED log-entry system will be up and running soon. Alternative for those doing paper logs is that you can scan it and send in a scanned LOG via e-mail with claimed score.

The SOAPBOX for 2016 NRR is WAY BEHIND due to having to fulfill all of these other roles. I will try to post it soon.

Thank you to those who contributed to the budget for NRR 2017.

PASS THE WORD! Send out flyers!! Send them with your QSLs. Sne dthem with your e-mails! Take them to hamfests! (I will be planning to give them out at the Melbourne, FL hamfest next weekend.)

Please download the flyer! Print them... use them!!

The flyer is here:
http://af4k.com/imag/ham/NRRadd2.pdf

Get your rigs ready!! There is going to be a huge turnout for this 9 day event in February my friends!!

73 de AF4K - Bry
Co-chair, NRR 2017

27084. Re: [regenrx] 400 volt zener power supply for geiger tube

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-01 20:47:41 UTC
From: Rob
Topic: 27078 Message: 27084

I just bought PDFs of both the first and second editions.

The Boys' Second Book of Radio and Electronics by Alfred Morgan

On 10/01/2016 12:04 PM, msalbert@... [regenrx] wrote:
>
> Hi Rob, most GM tubes don't require much current, a few microamps
> maybe. Very roughly, they are "charged up" like a capacitor, then
> discharged by the radiation. That discharge is passed through a
> high-value resistor, then amplified to make the characteristic
> "clicking" sound. So HV current needs are very low; for most GM power
> supplies even a DMM will be too much load and crash it. One circuit
> you mentioned uses a push button to generate HV pulses to charge up
> the GM tube, which can then operate for quite a while. The Boys'
> Second Book of Radio and Electronics by Alfred Morgan has a project
> How to Make a Geiger Counter for less than $15 (1957) used the same
> HV technique. He says it "proved sensitive enough to detect the
> radioactive fallout which reached New York City from atomic bomb tests
> in Utah". I found a brief description of it here.
> http://covingtoninnovations.com/michael/blog/0408/index.html
> Probably there are a some GM tube HV supplies which are overbuilt and
> can do what you want. I've had good luck with nixie tube power
> supplies; several watts of power are possible in a few square inches.
> Depending on the design some extra effort will probably be needed to
> make them suitable for radio use. The inductor is a major source of
> RFI; changing to a toroid helps. One prebuilt module used an
> unsuitable electrolytic filter capacitor; it ran warm. Changing to a
> film type fixed it. I have not tried them with regens; maybe you'd
> need extra effort like shielding and feed-thru caps to get the
> switching noise down.
> Regards,
> Mark KB9VKE
> -----Original Message-----
> From: Rob roomberg@... [regenrx] <regenrx@yahoogroups.com>
> To: regenrx <regenrx@yahoogroups.com>
> Sent: Fri, Sep 30, 2016 2:24 pm
> Subject: [regenrx] 400 volt zener power supply for geiger tube
>
>
>
> I stumbled onto geiger tubes and instructables.com instructions
> how to build power supplies for these geiger tubes.....
>
> the PDFs:
> Simplest Geiger Counter

> by tanner_tech on September 8, 2016
>
> and
>
> Homemade Geiger Counter
> by electric_piano_5k on March 15, 2011
>
> picture of geiger tube:
> http://www.learnmorsecode.com/geiger/geiger.jpg
>
> Its not that I require any geiger counter right now to detect anything
> nuclear......
>
> MY INTEREST in these circuits is that they both describe build a
> battery operated
> power supply out of a 555 timer pulsing a transformer to get 1,000
> volts and then
> using 100 volt zener diodes stacked to create a 400 volt voltage drop
> across the
> zener which is then fed into the geiger tube.,,,,,, requiring very
> little... 10? miliamps.
>
> sooooooo..... just wondering.....
> is it feasible to use this method to make 100 volts for regen tube
> receiver circuits?
>
> Two schematics here:
> http://www.learnmorsecode.com/geiger/geiger2.jpg
>
> this one is fuzzy
> http://www.learnmorsecode.com/geiger/geiger4.jpg
>
> now....along those lines..... I build a circuit from a FOREST MIMS
> book about 30 years ago
> that ran on a 9 volt battery and made 220 volts:
> this circuit:
> http://www.learnmorsecode.com/geiger/hv.jpg
>
> Is it so farfetched to think this type of circuit can power a vaccuum
> tube receiver by adding
> the zeners and some smoothing capacitors?
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27085. Electric Radio Magazine Dec 2001 to Feb 2002

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-02 13:23:35 UTC
From: tannebri1@...
Topic: 27085 Message: 27085

Hi All

Has anyone a copy of the article by Bruce Vaughan December 2001 Jan 2002 Feb 2002 on his ultimate regen rx

Thanks
Brian

27086. Re: NRR 2017 p rogress☐

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-02 12:38:54 UTC
From: kf8zn@...
Topic: 27083 Message: 27086

What are suggested frequencies?

AC2Q

27087. Re: Electric Radio Magazine Dec 2001 to Feb 2002

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-02 15:49:47 UTC
From: mikhail-vulkov@...
Topic: 27085 Message: 27087

Here is some info:
http://www.qsl.net/k7fj/UltimateRegen.html http://www.qsl.net/k7fj/UltimateRegen.html

27088. Re: [regenrx] Electric Radio Magazine Dec 2001 to Feb 2002

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-02 20:34:48 UTC
From: Zoran Tukovic
Topic: 27085 Message: 27088

Hi Brian,

Original and compete (all) articles (in PDF) are in regenrx group under the Tuky folder.

Regards,
Tuky

On Sun, Oct 2, 2016 at 3:23 PM, tannebri1@... [regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> Hi All
>
>
> Has anyone a copy of the article by Bruce Vaughan December 2001 Jan 2002
> Feb 2002 on his ultimate regen rx
>
>
> Thanks
>
> Brian
>
>
>

27089. RS 2760419?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-02 22:50:16 UTC
From: rhulett1@...
Topic: 27089 Message: 27089

Wanting to build Kitchin Simple Regen Receiver, was looking for a 1N34A. Lots of them on Ebay, but there are so many copies of out of production parts. RS web said the store had them, the clerk said no. But in the parts bin were packages of "Germanium General Purpose Diodes DO-7" in the slot labeled 1N34A. Two in a package for $2.99, so bought a package. Now am wondering if a "DO-7" might be the same knockoff was trying to avoid. It says "replaces 1N34A".

Just curious.

73, Curt KB5JO

27090. Re: [regenrx] RS 2760419?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-02 23:05:47 UTC
From: Garey Barrell
Topic: 27089 Message: 27090

Curt -

'DO-7' is the package style. Some Germanium diodes, 1N270 for example, are made in DO-7 cases.
I don't think 1N34As were ever made in DO-7 though. The true 1N34A was a point-contact diode
sold in a case with the ends soldered closed.

Most 'substitute' 1N34As are actually Schottky diodes, which are 'almost' as good as detectors
as true 1N34As.

A lot of good diode information is available on the <midnightscience> website, devoted to crystal radio science....

--
73, Garey - K4OAH
Rome, GA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

rhulett1@... [regenrx] wrote:
>
>
> Wanting to build Kitchin Simple Regen Receiver, was looking for a 1N34A. Lots of them on
> Ebay, but there are so many copies of out of production parts. RS web said the store had
> them, the clerk said no. But in the parts bin were packages of "Germanium General Purpose
> Diodes DO-7" in the slot labeled 1N34A. Two in a package for $2.99, so bought a package. Now
> am wondering if a "DO-7" might be the same knockoff was trying to avoid. It says "replaces
> 1N34A".
>
> Just curious.
>
> 73, Curt KB5JO

27091. Re: [regenrx]Very sensitive germanium crystal diodes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-02 23:32:16 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27089 Message: 27091

Dear amigos: The Russian made germanium diodes that were manufactured in the 1970's are among the best I have ever tested on crystal sets... The famous SELENA B-215 and VEF-206 receivers used them.

They may be available from EBAY sellers that are located in former Soviet Union nations... The diodes can be hand picked for best performance from a large lot, and you will find that the plant's quality control OTK was really very good, as the statistical dispersion of parameters is rather narrow...

BTW, using four of those germanium diodes in the QUADRUPLER diode detector circuit , and adding a bit of ¨spice¨, that meaning a minute forward bias, a crystal set of simply amazing sensitivity is achieved.

73 and DX

Arnie Coro CO2KK

Now monitoring the path of huger Hurricane Matthew soon to make landfall somewhere in eastern Cuba, possibly near Guantanamo Bay and Santiago de Cuba city.... Category 4 storm expected to cause a lot of damage ! Ham radio operators already deployed at areas that are usually isolated by floods caused by the very heavy rains. Monitor Hurricane Watch Net onf 14325 and 7268 kiloHertz when storm is getting near to land ... with Jamaica, Haiti and Cuba along the path.

On 02/10/16 18:50, rhulett1@... [regenrx] wrote:
>
>
> Wanting to build Kitchin Simple Regen Receiver, was looking for a
> 1N34A. Lots of them on Ebay, but there are so many copies of out of
> production parts. RS web said the store had them, the clerk said no.
> But in the parts bin were packages of "Germanium General Purpose
> Diodes DO-7" in the slot labeled 1N34A. Two in a package for $2.99,
> so bought a package. Now am wondering if a "DO-7" might be the same
> knockoff was trying to avoid. It says "replaces 1N34A".
>
> Just curious.
>
> 73, Curt KB5JO
>
>
>
>
>
>

27092. Re: [regenrx] RS 2760419?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-02 23:59:03 UTC
From: rhulett1@...
Topic: 27089 Message: 27092

Ok. The package says "Germanium Diode" maybe that isn't true. I'll just use these diodes in the circuit and see how well it works. 72, Curt KB5JO

27093. Re: [regenrx] RS 2760419?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-03 00:05:11 UTC
From: Paul Martin
Topic: 27089 Message: 27093

In that application it'll probably be fine.

Paul

> On Oct 2, 2016, at 7:05 PM, Garey Barrell k4oah@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
> Curt -
>
> 'DO-7' is the package style. Some Germanium diodes, 1N270 for example, are made in DO-7 cases.
> I don't think 1N34As were ever made in DO-7 though. The true 1N34A was a point-contact diode
> sold in a case with the ends soldered closed.
>
> Most 'substitute' 1N34As are actually Schottky diodes, which are 'almost' as good as detectors
> as true 1N34As.
>
> A lot of good diode information is available on the <midnightscience> website, devoted to
> crystal radio science....
>
> --
> 73, Garey - K4OAH
> Rome, GA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> rhulett1@... [regenrx] wrote:
> >
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> > Wanting to build Kitchin Simple Regen Receiver, was looking for a 1N34A. Lots of them on
> > Ebay, but there are so many copies of out of production parts. RS web said the store had
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> > Diodes DO-7" in the slot labeled 1N34A. Two in a package for $2.99, so bought a package. Now
> > am wondering if a "DO-7" might be the same knockoff was trying to avoid. It says "replaces
> > 1N34A".
> >

> > Just curious.
> >
> > 73, Curt KB5JO
>
>

27094. Re: RS 2760419?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-03 07:04:53 UTC
From: b_weeber@...
Topic: 27089 Message: 27094

Hello Curt

Are you building this circuit?
http://www.arrl.org/files/file/Technology/tis/info/pdf/0009061.pdf
http://www.arrl.org/files/file/Technology/tis/info/pdf/0009061.pdf

Then make sure to use a genuine Germanium diode. Others are not working well in this kind of floating detector.

Best regard,
Bernd

27095. Re: RS 2760419?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-03 10:28:35 UTC
From: rhulett1@...
Topic: 27089 Message: 27095

Yes, that is the circuit. K7QO suggested building something in November, a simple regen being one suggestion. So decided an N1TEV design ought to work.

I have no way to identify a genuine anything among the fakes and counterfeits what with the Chinese busy marking/renaming cheap junk as high quality, flooding every market for anything.

So, will let the circuit performance tell me what is and what isn't genuine. I'll just test different diodes and see if any of them detect signals.

72, Curt KB5JO

27096. Re: [regenrx]Very sensitive germanium crystal diodes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-03 11:10:03 UTC
From: kf8zn@...
Topic: 27089 Message: 27096

What is the part number for the Rusky Diodes?

27097. Re: [regenrx] Re: RS 2760419?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-03 11:41:58 UTC
From: Paul Martin
Topic: 27089 Message: 27097

I used a generic 1N34 diode from Rat Shack in the Desert Ratt type of regen and it worked fine. Maybe I got lucky.
Paul

On Monday, October 3, 2016 6:28 AM, "rhulett1@... [regenrx]" <regenrx@yahoogroups.com> wrote:

Yes, that is the circuit. K7QO suggested building something in November, a simple regen being one suggestion. So decided an N1TEV design ought to work.

I have no way to identify a genuine anything among the fakes and counterfeits what with the Chinese busy marking/renaming cheap junk as high quality, flooding every market for anything.

So, will let the circuit performance tell me what is and what isn't genuine. I'll just test different diodes and see if any of them detect signals.

72, Curt KB5JO

27098. Re: RS 2760419?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-03 12:02:17 UTC
From: b_weeber@...
Topic: 27089 Message: 27098

Don't know, if the link is working. I did real measurements some time ago, to confirm simulation results. A Germanium diode on a high impedance load of 1Meg ist working best. A Schottky diode is rectifying somehow, but the output signal is much smaller and shows distortion. A standard 1N4148 doesn't detect at all!
https://groups.yahoo.com/neo/groups/regenrx-simulations/conversations/topics/32
https://groups.yahoo.com/neo/groups/regenrx-simulations/conversations/topics/32

27099. What is the part number for the Rusky Diodes--- D311 and D9B germanium diodes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-03 14:58:54 UTC
From: Rob
Topic: 27099 Message: 27099

D311 and D9B

EBAY

$35 for 300 diodes:

300 x D311 (Д311) Germanium Ge Diodes 30V 40mA Made in USSR NOS

$18 for 200 diodes:

200x RARE D9B 10V 40mA USSR Soviet Military GERMANIUM Ge DETECTOR DIODE Д9Б

27100. Re: [regenrx] What is the part number for the Rusky Diodes--- D311 and D9B germanium diodes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-03 15:12:59 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27099 Message: 27100

Dear amigos:

If you have access to a large number of D311 Soviet germanium diodes...
it is a worthwhile and entertaining task to test them one by one
connected to the actual circuit where you need to use it...
I have a question ... What can be gained or lost by using Schottky type
diodes as a weak signal detector ?

Also... in SPRAT the G-QRP Club excellent magazine they published years
ago a circuit for a crystal radio under the name ¨ QUADRUPLE DIODES ¨
detector... I have lost the original magazine... and now that so many
persons are once again motivated by the wonders of simple radios... it
would be nice to recover the circuit diagram.

BTW, the Kitchen floating diode detector is not as efficient as a
detector with a termination... !!!

73 and DX

From Arnie Coro

now operating amateur radio station CO2KK on the Cuban Amateur Radio
Emergency Net now handling the Hurricane Matthew Emergency in progress...

On 03/10/16 10:58, Rob roomberg@... [regenrx] wrote:
>
>
> D311 and D9B
>
>
> EBAY
>
> $35 for 300 diodes:
>
> 300 x D311 (Д311) Germanium Ge Diodes 30V 40mA Made in USSR NOS
>
>
>
> $18 for 200 diodes:
>
> 200x RARE D9B 10V 40mA USSR Soviet Military GERMANIUM Ge DETECTOR
> DIODE Д9Б
>
>
>

>

27101. Re: [regenrx] What is the part number for the Rusky Diodes--- D311 and D9B germanium diodes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-03 15:59:56 UTC
From: Rob
Topic: 27099 Message: 27101

I'm not an electrical engineer. I am a radio electronics hobbyist.
2 years ago....when I could not find real 1N34A diodes I did go down the Schottky diode path.
I experimented with a bunch of Schottky diodes found in example circuits all over the internet.
My test here was very simple.
I would set up my 1N34A diode bare bones crystal radio and listen to the local radio station
and then
swap out the 1N34A with the "new" diode and compare what I heard.

http://www.learnmorsecode.com/help/xtalbarebones.jpg
http://www.learnmorsecode.com/help/xtal1.html

this was truly a GO..NO GO type of test.... noting that I get ZERO reception here in my box canyon
location of anything more than ONE local radio station during daylight hours.
And that station is a preacher screaming non-stop fire and brimstone crap and once in a while he takes
a break from preaching and tries to sell you investment opportunities in gold.

So my disappoinment level was pretty high.
Even if I could hear something on my crystal radio I didn't LIKE what I heard on my crystal radio
and I could not justify kitting these for scouts if all they were going to hear was this one dick.
Thats why I switched to researching regenerative receivers.

Back to Schottky....
what I found was that silocon diodes like 1N4148 were silent no go....
as expected.

I found that most Schottky diodes that other people raved about working great as
a 1N34A replacement.... WOULD receive the local radio station..
BUT
the audio range was sort of crunchy.... would clip on the highs and left out the lows.
This was strictly a hearing test for me.

I concluded that if I wanted to make a project for the kids to do desktop to desktop
wireless Morse code transmissions then YES... the very cheap and readily

available Schottky diodes
would work
BUT
I would not want to have a kid go to the trouble of building a crystal
radio around a Schottky
diode looking for real music radio stations.... IF I could give that kid
a cat whisker germanium diode
that outperformed the audio crunch of the Schottky.

again... I am not an engineer.
this was stricly hobby observation.....
so if anyone is building great sounding Schottky crystal radios then
please share your schematics.

On 10/03/2016 11:12 AM, 'Prof. Arnaldo Coro Antich' coro@...
[regenrx] wrote:
>
> Dear amigos:
>
> If you have access to a large number of D311 Soviet germanium
> diodes... it is a worthwhile and entertaining task to test them one by
> one connected to the actual circuit where you need to use it...
> I have a question ... What can be gained or lost by using Schottky
> type diodes as a weak signal detector ?
>
> Also... in SPRAT the G-QRP Club excellent magazine they published
> years ago a circuit for a crystal radio under the name ¨ QUADRUPLE
> DIODES ¨ detector... I have lost the original magazine... and now that
> so many persons are once again motivated by the wonders of simple
> radios... it would be nice to recover the circuit diagram.
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> BTW, the Kitchen floating diode detector is not as efficient as a
> detector with a termination... !!!
>
> 73 and DX
>
> From Arnie Coro
>
> now operating amateur radio station CO2KK on the Cuban Amateur Radio
> Emergency Net now handling the Hurricane Matthew Emergency in progress...
>
>
> On 03/10/16 10:58, Rob roomberg@... [regenrx] wrote:
>> D311 and D9B
>>
>>
>> EBAY
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>> $35 for 300 diodes:
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>> 300 x D311 (Д311) Germanium Ge Diodes 30V 40mA Made in USSR NOS

>>
>>
>>
>> $18 for 200 diodes:
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>> 200x RARE D9B 10V 40mA USSR Soviet Military GERMANIUM Ge DETECTOR
>> DIODE Д9Б
>>
>
>

27102. Re: [regenrx] What is the part number for the Rusky Diodes--- D311 and D9B germanium diodes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-03 21:16:07 UTC
From: harmonicworkshop@...
Topic: 27099 Message: 27102

The ones listed as D-18/FO-125 ex-USSR Germainium Detector Diode from a Ukrainian vendor on the auction site are 6 bucks for twenty and 7 for shipping. They have a neat vintage look, are a good deal and seem to work very well up to at least 12mHz in an AM/SW crystal set and as a detector w/Q multiplier similar to the Kitchen set.

Cheers,
gb

27103. Re: [regenrx] What is the part number for the Rusky Diodes--- D311 and D9B germanium diodes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-03 21:18:13 UTC
From: harmonicworkshop@...
Topic: 27099 Message: 27103

They do sound good too!

27104. RE: [regenrx] What is the part number for the Rusky Diodes--- D311 and D9B germanium diodes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-03 22:36:58 UTC
From: Hubert Miller
Topic: 27099 Message: 27104

Hola Arnie y otros radioaficionados –
I'm glad this subject of the Russ diodes came up, and i'm going to buy some. I also like it that they are visually interesting!
Now – i'll see if i can get a SPRAT DVD with the schematic and if i do, i'll get the schematic to you. I hope it's not just a fullwave bridge (4 diodes)
because i found that not as good as the fullwave voltage doubler. I believe the back resistance or capacitance of the 2 diodes not being used
on alternate half cycles loads the tuned circuit.
You mentioned a 4x voltage multiplier crystal radio and i don't see how that can work into an actual practical load resistor where power, not
just voltage is required. The doubler does work because it's just using both halves of the cycle.
For crystal radios, i know Schottky diodes have been touted, but i never found them as good as good germaniums.
Also – using a piezo headphone, like the Brush company of years ago – the floating diode is just as effective as the conventional circuit. It's kind
of amazing, but true!
Unfortunately for crystal radio DXing, we have 2 local stations and 2 weather and sea conditions broadcasts on the MW band here, then the
next MW stations are 110 km away, and to dodge the locals takes very good selectivity.
-Hue Miller

>Dear amigos:If you have access to a large number of D311 Soviet germanium diodes... it is a worthwhile and entertaining task to test them one by one connected to the actual circuit where you need to use it...
I have a question ... What can be gained or lost by using Schottky type diodes as a weak signal detector ?

Also... in SPRAT the G-QRP Club excellent magazine they published years ago a circuit for a crystal radio under the name ¨ QUADRUPLE DIODES ¨ detector... I have lost the original magazine... and now that so many persons are once again motivated by the wonders of simple radios... it would be nice to recover the circuit diagram.

BTW, the Kitchen floating diode detector is not as efficient as a detector with a termination... !!!

73 and DX From Arnie Coro

–'---

27105. Re: [regenrx] What is the part number for the Rusky Diodes--- D311 and D9B germanium diodes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-04 07:31:49 UTC
From: harmonicworkshop@...
Topic: 27099 Message: 27105
Attachments: 1 described; binary payloads are missing from this source WARC

Here is a graph of selected germainium detector diodes including the D-18. The apparently unavailable ITT FO-215, makes the gold-bonded 1N270 and Russian D-18 very useful. What are often sold as 1N34A's don't seem to do as well sensitivity or audio wise.
-geary

27106. FS: Echophone EC-1 Receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-04 13:01:49 UTC
From: Bry Carling
Topic: 27106 Message: 27106

FOR SALE: Echophone EC-1 Receiver $125.00 plus shipping.

73 de AF4K, Brian "Bry" Carling

27107. Re: NRR 20 17 progres s☐

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-04 13:27:47 UTC
From: Bry Carling
Topic: 27107 Message: 27107

Thank you, "AC2Q",

We suggest mostly 3500 - 3600, 7050 - 7060, 7100 - 7125 kHz
Plus:
21.100 - 21.200 MHz
28.100 - 28.200 MHz

When things get cranking in February they will be easy to find. Meanwhile you may find some guys on those frequencies, especially 40m running the old rigs!

The operating frequencies are also posted on the web site:
http://NoviceRigRoundup.com
>>Re: NRR 2017 p rogress☐
Posted by: kf8zn@yahoo.com kf8zn
Date: Sun Oct 2, 2016 8:37 am ((PDT))

>>What are suggested frequencies?

>>AC2Q

27108. Re: Electric Radio Magazine Dec 2001 to Feb 2002

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-04 15:15:42 UTC
From: tannebri1@...
Topic: 27085 Message: 27108

Many Thanks to everyone who responded I have found the article in the groups files.

Many Thanks

Brian

27109. RE: [regenrx] What is the part number for the Rusky Diodes--- D311 and D9B germanium diodes [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-04 16:22:05 UTC
From: Hubert Miller
Topic: 27099 Message: 27109

AAZ18 is another goldbond diode, and seems to be available at low cost.

Looking up the specs, i learned only now that i had misordered and bought AAZ17, which is a different

animal, and that explains to me now why they didn’t work in crystal set radio.

In 1N34-types, germanium diodes, it seems to me that larger=better, in my experience. Some

old germanium transistors work just as well, i mean using them as diodes.

-H M

27110. Re: [regenrx] What is the part number for the Rusky Diodes--- D311 and D9B germanium diodes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-04 17:02:56 UTC
From: Rob
Topic: 27099 Message: 27110

http://www.learnmorsecode.com/help/diodesmail.jpg

The D9B , 2AA113 and D311 are the Russian diodes.
Arnie speaks very highly of the big black D311 diodes.

The two marked unknown are real mystery meat to me.

ALL of these diodes (except the mystery meat) came from batches of
diodes... 50 to 200 diodes....which were tested and DID receive local
radio stations on my simple crystal radio two years ago.
I was preparing to kit radios for scouts.

When I ran into problems getting cat whisker germanium diodes I looked
into schottky diodes.
I never really was happy with the schottky diodes.... they just didn't
sound as good as the cat whisker diodes.
BUT
they may work great for you.... I was using them in a strictly bare
bones crystal set.
Note the blue diodes.......CDSH270.... I bought them from MOUSER.com
per THEIR advising me to use them instead of obsolete 1N34A diodes.
These CDSH270 diodes were by far the worst compared to the other
schottky diodes I experimented with.

I found that the 1N5817 schottky was a suitable replacement for 1N34A
diodes with very little difference in reception.
AND
just for fun.... sort of to show the kids how to make James Bond radios
.... I played with SMT 1N5822 schottky
diodes.

Noting that sometimes surplus reels of 5,000 diodes appear on EBAY
...... I grab what I can cheap.....
and then if it does end up in a scout project I know it did not cost
more than a buck to build a radio.....
since the diodes cost no more than pennies.
I just could not get that kind of massive price break with germanium diodes.

I am very interested in learning how to build better radios with either
the NOS germaniums or the newer schottky diodes.
It doesn't matter to me.... I now have a pile of both old and new.

On 10/04/2016 12:22 PM, Hubert Miller kargo_cult@... [regenrx] wrote:
>
> AAZ18 is another goldbond diode, and seems to be available at low cost.

>
> Looking up the specs, i learned only now that i had misordered and
> bought AAZ17, which is a different
>
> animal, and that explains to me now why they didn’t work in crystal
> set radio.
>
> In 1N34-types, germanium diodes, it seems to me that larger=better, in
> my experience. Some
>
> old germanium transistors work just as well, i mean using them as diodes.
>
> -H M
>
>

27111. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-04 19:23:26 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 27111

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Leonard's Stuff/Mk.8 Mod 4f.bmp
Uploaded by : leonardmeek <lemeek@...>
Description : Updates and corrections

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Leonard%27s%20Stuff/Mk.8%20Mod%204f.bmp

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

leonardmeek <lemeek@...>

27112. Mk.8

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-04 19:55:55 UTC
From: Leonard Meek
Topic: 14969 Message: 27112

After reading Mike Bittner's article in ER #328, I decided to take another look at my Mk.8. I agree with Mike, the regen circuit in the RCA tube manual is about the best. I like his use of a cascode RF amp. I may backfit my Mk.8 with the same circuit. My circuit uses an over complicated varactor tuning setup that doesn't perform well enough to be used in other sets. It helps a little on MF but becomes useless on higher freqs. Besides calculating various component changes, I added a pair of germanium diodes (ITT152071 because that's the first ones I came up with, but I guess any Ge diode will work) across the AF gain pot to cut down on some of the static I'm getting from my neighbor. I think it's from his motion sensors. Every time a car passes the house, all his yard lights turn on. Annoying. Sensitivity of the Mk.8 is quite good, judging by the number of weak signals it can pick up. As B. Weeber says, a stage of tuned RF ahead of the detector can do wonders. I may scrap all my other circuits in favor of this type.

Leonard

27114. Re: [regenrx] Mk.8

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-04 21:20:08 UTC
From: Michael
Topic: 14969 Message: 27114

Is the ER #328 article available online?
Will we have access to the update?

Michael

On 04.10.16 22:17, 'Michael Bittner' mmab@... [regenrx] wrote:
>
>
> Leonard and others who have read my regen article in ER #328,
>
> Look for an update on the article in an upcoming issue of ER. The
> cascode RF amp has been modified in order to mitigate the problem of
> interaction between the regen and sensitivity controls that was
> mentioned in the article.
>
> Mike, W6MAB

27116. Re: [regenrx] Re: cheap audio chips SPEAKERS are NOT created EQUAL

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-05 02:34:18 UTC
From: Richard
Topic: 27056 Message: 27116

That matches my experience. I am resurrecting a McMurdo-Silver 801
regen which had been very wet, and installed a 2 inch speaker to replace
the missing 2 1/2 inch one. Comparing it with larger 4 inch ones it has
noticeably less output. However, in the circumstance it's acceptable.
The #801 is working now, but still needs help.

Richard, AA1P

On 09/28/2016 06:23 PM, Rob roomberg@... [regenrx] wrote:
>
> All of my speaker experiments were done with loose speakers, nothing
> in a mounting or cabinet.
>
> I do not have numbers like you Les but I have had some very
> interesting revelations here about
> multiple speakers.
>
> The goal being to come up with something for the kids to build I
> bought cheap 8 ohm 3 inch speakers from
> ebay....4 different kinds , then built an amplifier.. and hard wired
> the speaker:
> http://www.learnmorsecode.com/amp/tl431PCBdone1.jpg
>
> I did this with two different designs
>
> http://www.learnmorsecode.com/amp/tl431.html
>
> and then
> resorted to using wire wrap pins as plug posts instead of using up the
> speaker supply here.
>
> I really was surpised at how quiet these speakers were.... so I
> swapped out the speakers where I built pin instead of hard wired
> speakers.....
> and found that no two speakers sounded the same
> and all were unacceptably low volume..... would be fine for
> headphones... but not for desk top audio.
>
> My REAL problem was that all of my amplifiers really need to be having
> a high impedance buffer between my experimental amplifier circuits and
> the 716 regen circuit and they all really did come to life once I
> added the
> darlington pre-amp circuit......
>

> BUT
> talking about speakers here......
> even after I did add the darlington I ran through the same audio tests
> and concluded that
> the 3 inch speakers really did suck compared to using a 10 inch speaker.
>
> So then I tried a few high end speakers.... car steareo speakers....
> and they didn't sound any good at all.....
> not nearly as loud as the simple Radio Shack 8 ohm speaker meant to be
> used in a bookshelf speaker.
>
> This lead me to believe that all of my tiny 3 inch speakers need
> something... perhaps some more research will reveal
> circuit errors I made ......
> or not....
> because the large speaker sounds great.
>
> My amplifier circuits were a variety from scratch built LM386 and
> descrete components .....
>
> I didn't just use an LM386 kit.
>
>
> On 09/28/2016 05:39 PM, les.au49@... [regenrx] wrote:
>>
>> I bought several LM386 modules from eBay.
>> I got two 'styles'. In one, the volume control is a trim
>> (screwdriver) pot.
>> The second had a conventional volume pot, a 3.5mm jack (for input)
>> and a DC power connector.
>>
>> I haven't tested the second item, but looking at the board I suspect
>> the (volume) pot works in "reverse" ie CW is minimum volume.
>>
>> I wanted to see how much power I needed to drive a speaker.
>> Answer: It depends on the size of the speaker!
>> Small speakers are inefficient. The results below refer to a 10 inch
>> speaker 'rescued' from an electronic organ.
>>
>> LM386 amplifier module. Sensitivity.
>> Using a "large" spkr (eg 10 inch)
>>
>> Signal to speaker.
>> 30mV use-able output in approx 100uW
>> quiet conditions
>>
>> 60mV listening in bed volume 500uW
>>
>> 90mV quite useable volume 1mW
>>

>> 200mV loud enough to hear across 5mW
>> the room when no other noise.
>>
>> 400mV loud enough to use 20mW
>> on the work-bench.
>>
>> 500mV reference level. 30mW
>> 700mV reference level &n bsp; 60mW
>>
>> Using a small speaker (from a PC) I got no use-able sound below 100mV.
>>
>> _
>
>

27118. Re: [regenrx] Mk.8

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-05 08:17:40 UTC
From: Michael
Topic: 14969 Message: 27118

I tried to find the ER articles. Apparently only available
in the US as a minimum order of $10. Any chance as copyright
holder you could post the updated schematic here, Mike?
We could probably figure it out without the text of the articles.

Michael
UK

On 05.10.16 04:23, Rob roomberg@... [regenrx] wrote:
>
> So whats all this talk about a W6MAB article??????
> How do we read this ER#328 article?
>
> On 10/04/2016 05:17 PM, 'Michael Bittner' mmab@... [regenrx] wrote:

>> Leonard and others who have read my regen article in ER #328,
>>
>> Look for an update on the article in an upcoming issue of ER. The
>> cascode RF amp has been modified in order to mitigate the problem of
>> interaction between the regen and sensitivity controls that was
>> mentioned in the article.
>>
>> Mike, W6MAB

27119. Re: [regenrx] Mk.8

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-05 16:00:35 UTC
From: Rob
Topic: 14969 Message: 27119

What does ER stand for and WHERE is available..?? free or pay.. I don't
care..... I'm still stumbling over
WHAT we are talking about.

The MK schematics are always nice to examine. Thanks Les.

On 10/05/2016 04:17 AM, Michael michael.setaazul@...
[regenrx] wrote:
> I tried to find the ER articles. Apparently only available
> in the US as a minimum order of $10. Any chance as copyright
> holder you could post the updated schematic here, Mike?
> We could probably figure it out without the text of the articles.
>
> Michael
> UK
>
> On 05.10.16 04:23, Rob roomberg@... [regenrx] wrote:
>> So whats all this talk about a W6MAB article??????
>> How do we read this ER#328 article?
>>
>> On 10/04/2016 05:17 PM, 'Michael Bittner' mmab@... [regenrx] wrote:
>>> Leonard and others who have read my regen article in ER #328,
>>>
>>> Look for an update on the article in an upcoming issue of ER. The
>>> cascode RF amp has been modified in order to mitigate the problem of
>>> interaction between the regen and sensitivity controls that was
>>> mentioned in the article.
>>>
>>> Mike, W6MAB
>
> ------------------------------------
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>
> "In the interest of Regenerating radio's lost art of Regeneration"
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> Yahoo Groups Links
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27120. RE: [regenrx] Mk.8

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-05 16:01:42 UTC
From: Larry
Topic: 14969 Message: 27120

Leonard, I dug up my RCA Tube manual and found the Regenerative Radio circuit. Do you have information to start me off on the coils of the schematic? At least turns ratios!

Larry

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Tuesday, October 04, 2016 3:56 PM
To: regenrx@yahoogroups.com
Subject: [regenrx] Mk.8

After reading Mike Bittner's article in ER #328, I decided to take another look at my Mk.8. I agree with Mike, the regen circuit in the RCA tube manual is about the best. I like his use of a cascode RF amp. I may backfit my Mk.8 with the same circuit. My circuit uses an over complicated varactor tuning setup that doesn't perform well enough to be used in other sets. It helps a little on MF but becomes useless on higher freqs. Besides calculating various component changes, I added a pair of germanium diodes (ITT152071 because that's the first ones I came up with, but I guess any Ge diode will work) across the AF gain pot to cut down on some of the static I'm getting from my neighbor. I think it's from his motion sensors. Every time a car passes the house, all his yard lights turn on. Annoying. Sensitivity of the Mk.8 is quite good, judging by the number of weak signals it can pick up. As B. Weeber says, a stage of tuned RF ahead of the detector can do wonders. I may scrap all my other circuits in favor of this type.

Leonard

27121. Re: [regenrx] Mk.8

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-05 16:37:24 UTC
From: Phil
Topic: 14969 Message: 27121

HI,

I have the RC-29 RCA tube manual (copyright 1973) and can't find any
regen receiver circuits in it. The only receiver circuits are
superhets. I suppose that I'd need to find an even older one to find the
circuit?

73 From "The Beaconeer's Lair"
Specializing in DXing NDBs (Longwave Beacons)
Phil, KO6BB, http://www.qsl.net/ko6bb/
KO6BB/B beacon, ~20W to a Ringo Vertical, 24/7 on 28.290 MHz

Merced, Central California, 37,18,37N 120,30,6W CM97rh

On 10/4/2016 7:55 PM, 'Leonard Meek' lemeek@... [regenrx] wrote:
>
> After reading Mike Bittner's article in ER #328, I decided to take
> another look at my Mk.8. I agree with Mike, the regen circuit in the
> RCA tube manual is about the best. I like his use of a cascode RF amp.
> I may backfit my Mk.8 with the same circuit. My circuit uses an over
> complicated varactor tuning setup that doesn't perform well enough to
> be used in other sets. It helps a little on MF but becomes useless on
> higher freqs. Besides calculating various component changes, I added a
> pair of germanium diodes (ITT152071 because that's the first ones I
> came up with, but I guess any Ge diode will work) across the AF gain
> pot to cut down on some of the static I'm getting from my neighbor. I
> think it's from his motion sensors. Every time a car passes the house,
> all his yard lights turn on. Annoying. Sensitivity of the Mk.8 is
> quite good, judging by the number of weak signals it can pick up. As
> B. Weeber says, a stage of tuned RF ahead of the detector can do
> wonders. I may scrap all my other circuits in favor of this type.
> Leonard

27122. RE: [regenrx] Mk.8

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-05 17:20:01 UTC
From: Larry
Topic: 14969 Message: 27122

The Beaconeer's Lair, my RCA tube manual is 1948 and the regenerative receiver is on page 220. Do you need me to send it to you?
Larry

-----Original Message-----
From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Wednesday, October 05, 2016 12:37 PM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Mk.8

HI,

I have the RC-29 RCA tube manual (copyright 1973) and can't find any regen receiver circuits in it. The only receiver circuits are superhets. I suppose that I'd need to find an even older one to find the circuit?

73 From "The Beaconeer's Lair"
Specializing in DXing NDBs (Longwave Beacons) Phil, KO6BB,
http://www.qsl.net/ko6bb/ KO6BB/B beacon, ~20W to a Ringo Vertical, 24/7 on 28.290 MHz

Merced, Central California, 37,18,37N 120,30,6W CM97rh

On 10/4/2016 7:55 PM, 'Leonard Meek' lemeek@... [regenrx] wrote:
>
> After reading Mike Bittner's article in ER #328, I decided to take
> another look at my Mk.8. I agree with Mike, the regen circuit in the
> RCA tube manual is about the best. I like his use of a cascode RF amp.
> I may backfit my Mk.8 with the same circuit. My circuit uses an over
> complicated varactor tuning setup that doesn't perform well enough to
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> higher freqs. Besides calculating various component changes, I added a
> pair of germanium diodes (ITT152071 because that's the first ones I
> came up with, but I guess any Ge diode will work) across the AF gain
> pot to cut down on some of the static I'm getting from my neighbor. I
> think it's from his motion sensors. Every time a car passes the house,
> all his yard lights turn on. Annoying. Sensitivity of the Mk.8 is
> quite good, judging by the number of weak signals it can pick up. As
> B. Weeber says, a stage of tuned RF ahead of the detector can do
> wonders. I may scrap all my other circuits in favor of this type.
> Leonard

"In the interest of Regenerating radio's lost art of Regeneration"

Yahoo Groups Links

27125. Re: [regenrx] Mk.8

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-05 17:55:19 UTC
From: Leonard Meek
Topic: 14969 Message: 27125

Coils are always a problem, but I don't think they're as critical as you might think. Some time ago I wound a set of coils on 4 pin forms, before I knew much about building regens. I didn't even know the inductance of the coils I was winding. I used a table from one of the "Short Wave Radio Manuals," 1934 or 1935. I think they were based in a varicap of 140pF. Since then I've used them with other varicaps varying from 80pF to 400pF. Of course there blanks and overlaps, depending on which varicap they're tied to, but that doesn't bother me much. The idea is to get the circuit working first, then worry about trimming it later. It's a good idea to wind a few more turns than you need. Then you can remove one turn at a time to get to the number you need.

Leonard
----- Original Message -----
From: 'Larry' lbeaty@windstream.net [regenrx]
To: regenrx@yahoogroups.com
Sent: Wednesday, October 05, 2016 6:01 AM
Subject: RE: [regenrx] Mk.8

Leonard, I dug up my RCA Tube manual and found the Regenerative Radio circuit. Do you have information to start me off on the coils of the schematic? At least turns ratios!

Larry

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Tuesday, October 04, 2016 3:56 PM
To: regenrx@yahoogroups.com
Subject: [regenrx] Mk.8

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Leonard

27126. Re: [regenrx] Mk.8

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-05 18:02:14 UTC
From: Leonard Meek
Topic: 14969 Message: 27126

You're right. I just looked in my copy and it's not there. There's a site where you can download copies of all the tube manuals, but I don't know how to access it. Maybe one of the more computer literate members can guide you.

Leonard

----- Original Message -----
From: "Phil ko6bb1@... [regenrx]" <regenrx@yahoogroups.com>
To: <regenrx@yahoogroups.com>
Sent: Wednesday, October 05, 2016 6:37 AM
Subject: Re: [regenrx] Mk.8

> HI,
>
> I have the RC-29 RCA tube manual (copyright 1973) and can't find any
> regen receiver circuits in it. The only receiver circuits are
> superhets. I suppose that I'd need to find an even older one to find the
> circuit?
>
> 73 From "The Beaconeer's Lair"
> Specializing in DXing NDBs (Longwave Beacons)
> Phil, KO6BB, http://www.qsl.net/ko6bb/
> KO6BB/B beacon, ~20W to a Ringo Vertical, 24/7 on 28.290 MHz
>
> Merced, Central California, 37,18,37N 120,30,6W CM97rh
>
> On 10/4/2016 7:55 PM, 'Leonard Meek' lemeek@... [regenrx]
> wrote:
>>
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>> another look at my Mk.8. I agree with Mike, the regen circuit in the
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>> quite good, judging by the number of weak signals it can pick up. As
>> B. Weeber says, a stage of tuned RF ahead of the detector can do
>> wonders. I may scrap all my other circuits in favor of this type.
>> Leonard
>

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> Yahoo Groups Links
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27127. Re: [regenrx] Mk.8

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-05 19:34:02 UTC
From: Michael
Topic: 14969 Message: 27127

Many thanks for trying to give us access, Mike; very much appreciated.
However, a GG account seems requisite to access the file.
No idea what this is or how to achieve it. If I had a soul,
I would happily sell its worthlessness to GG in order
to access such gems as yours...

Any other way to upload the schematic to a free-access site???

With solar emissions, invisible asteroids and comets lurking
to pounce, all this seems so infinitessimally pathetic...

Michael
UK

On 05.10.16 18:21, 'Michael Bittner' mmab@... [regenrx] wrote:

> ER stands for Electric Radio magazine. Find out more about it at:
> https://www.ermag.com/
>
> I did not build the RCA Tube Manual (RC-15) circuit and cannot vouch for its
> performance. I did copy its basic 1-V-2 circuit architecture.
>
> The RCA circuit's tube lineup is 6SK7, 6SK7, 6C4 and triode-connected 6F6
> with choke coupling to the 6C4, and transformer coupling to the 6F6. My
> circuit's tube lineup is 6SN7, 6SJ7, 6SJ7 and pentode connected 6F6, with
> resistance couplings to the 2nd 6SJ7 and the 6F6.
>
> The updated schematic for my regen can be found at:
> https://photos.google.com/album/AF1QipOcL5MwApzBSdhYrfuJMJyqDzo4Uk_tpzVFJZv7
>
> This is my first attempt at using Google photos, so I hope the pix come
> through OK. For some reason, Google insists on putting the two halves of
> the schematic in reverse order.
>
> Mike, W6MAB

27131. Re: [regenrx] Mk.8

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-05 22:13:12 UTC
From: Michael
Topic: 14969 Message: 27131

On 05.10.16 23:03, Michael wrote:

Mike, I now have downloaded your kmmab57 1V2 2A and 2B.
Initial scrutiny suggests you have impressively
refined the design to replicable standard. When
domestic impediments permit, I would love to burn
my finger tips with the iron... I might swap the
RF stage for a GG RF amp and the audio for an ex-PC
speaker set, but your core would be the gem.

Many many thanks for sharing your design with us!

Michael UK

>
> On 05.10.16 22:44, 'Michael Bittner' mmab@... [regenrx] wrote:
>>
>> ----- Original Message ----- From: "Michael Bittner"
>>
>> I have attempted to upload the updated schematics on my regen rcvr in ER
>> #328 to the regenrx photo files
>> https://beta.groups.yahoo.com/neo/groups/regenrx/photos/albums/1495660471.
>>
>> We'll see how that works out.
>> Mike, W6MAB

27134. Re: [regenrx] Mk.8

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-05 23:10:31 UTC
From: John Maxwell
Topic: 14969 Message: 27134

On 10/05/2016 06:50:41 PM, 'Michael Bittner' mmab@... [regenrx] wrote:
> John,
> Gotta get me one of them CRM-114s.
> Mike

Here y'go: http://crm114.sourceforge.net/

:-)

--
John Maxwell KB3VLL jmax@...

"'Awesome' used to refer to the feeling when you were in the presence
of God. Now it refers to a bagel that doesn't suck."
-Chet Hendrickson

27135. Re: [regenrx] Mk.8

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-06 00:45:59 UTC
From: david.newkirk@...
Topic: 14969 Message: 27135

Mike wrote:

> I hope you will share your Grounded Grid RF amp with us when you get around
to building it. I had thought of doing the same thing until I noticed that
V1B is functioning as a GG amp.

V1A and V1B are operating in cascode--that is, as a synthetic tetrode. You could replace them with a 6SJ7, suitably wired (connect its suppressor grid, G3, to common) and notice little or no difference in performance.

For a grounded-grid amplifier that works well at 7 MHz and lower frequencies--haven't used it at higher frequencies yet--see the first stage in the two schematics in my page at http://dpnwritings.nfshost.com/ej/wr/ http://dpnwritings.nfshost.com/ej/wr/ . Whatever gain the GG stage provides is incidental; its co-primary main functions are (a) to isolate the detector from the antenna and (b) to provide a dependably-low-impedance antenna input that supports the insertion of resistive attenuator networks to bring the antenna noise floor down to a level just above the detector noise floor.

Best regards,

Dave
amateur radio W9BRD

27136. Re: [regenrx] Mk.8

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-06 01:27:45 UTC
From: Charles Moizeau
Topic: 14969 Message: 27136

I have RCA tube manuals RC15 and RC16. They show dates of 1947 (marked with my name with its juvenile penmanship) and 1950. The only difference I see is the latter's substitution of a 6K6GT for the earlier 6F6 triode connected audio output stage.

6SK7 RF amplifier with gain control in its cathode; 6SK7 Hartley regen with screen voltage regen control and a 300-500 Henry choke (ouch--unobtanium) as its plate output load; capacitor coupled to a 6C5 voltage amplifier, in turn coupled through an interstage transformer to a 500K potentiometer volume control with its arm connected to the power amplifier's control grid.

Charles

_____
From: regenrx@yahoogroups.com <regenrx@yahoogroups.com> on behalf of 'Leonard Meek' lemeek@... [regenrx] <regenrx@yahoogroups.com>
Sent: Wednesday, October 5, 2016 2:02 PM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Mk.8

You're right. I just looked in my copy and it's not there. There's a site where you can download copies of all the tube manuals, but I don't know how to access it. Maybe one of the more computer literate members can guide you.

Leonard

----- Original Message -----
From: "Phil ko6bb1@gmail.com [regenrx]" <regenrx@yahoogroups.com>
To: <regenrx@yahoogroups.com>
Sent: Wednesday, October 05, 2016 6:37 AM
Subject: Re: [regenrx] Mk.8

> HI,
>
> I have the RC-29 RCA tube manual (copyright 1973) and can't find any
> regen receiver circuits in it. The only receiver circuits are
> superhets. I suppose that I'd need to find an even older one to find the
> circuit?
>
> 73 From "The Beaconeer's Lair"
> Specializing in DXing NDBs (Longwave Beacons)
> Phil, KO6BB, http://www.qsl.net/ko6bb/
[http://www.qsl.net/ko6bb/images/radiotwr.gif]<http://www.qsl.net/ko6bb/>

The KO6BB Site Index - QSL.net<http://www.qsl.net/ko6bb/>
www.qsl.net
Hello, my name is Philip and you have found the home-page of Amateur Radio Station KO6BB. These pages cover some of my various interests, including Amateur (Ham ...

> KO6BB/B beacon, ~20W to a Ringo Vertical, 24/7 on 28.290 MHz
>
> Merced, Central California, 37,18,37N 120,30,6W CM97rh
>
> On 10/4/2016 7:55 PM, 'Leonard Meek' lemeek@... [regenrx]
> wrote:
>>
>> After reading Mike Bittner's article in ER #328, I decided to take
>> another look at my Mk.8. I agree with Mike, the regen circuit in the
>> RCA tube manual is about the best. I like his use of a cascode RF amp.
>> I may backfit my Mk.8 with the same circuit. My circuit uses an over
>> complicated varactor tuning setup that doesn't perform well enough to
>> be used in other sets. It helps a little on MF but becomes useless on
>> higher freqs. Besides calculating various component changes, I added a
>> pair of germanium diodes (ITT152071 because that's the first ones I
>> came up with, but I guess any Ge diode will work) across the AF gain
>> pot to cut down on some of the static I'm getting from my neighbor. I
>> think it's from his motion sensors. Every time a car passes the house,
>> all his yard lights turn on. Annoying. Sensitivity of the Mk.8 is
>> quite good, judging by the number of weak signals it can pick up. As
>> B. Weeber says, a stage of tuned RF ahead of the detector can do
>> wonders. I may scrap all my other circuits in favor of this type.
>> Leonard
>
>
>
> ------------------------------------
>
> ------------------------------------
>
> "In the interest of Regenerating radio's lost art of Regeneration"
> ------------------------------------
>
> Yahoo Groups Links
>
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>
>

"In the interest of Regenerating radio's lost art of Regeneration"

Yahoo Groups Links

Yahoo! Groups<http://groups.yahoo.com/group/regenrx/>
groups.yahoo.com
/

Yahoo! Groups<http://groups.yahoo.com/group/regenrx/join>
groups.yahoo.com
/

(Yahoo! ID required)

27137. Re: [Bulk] Re: [regenrx] Mk.8

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-06 09:12:37 UTC
From: Michael
Topic: 14969 Message: 27137

On 06.10.16 01:45, david.newkirk@... [regenrx] wrote:

> Mike wrote:
>
>> I hope you will share your Grounded Grid RF amp with us when you get
> around
> to building it. I had thought of doing the same thing until I noticed that
> V1B is functioning as a GG amp.
>
> V1A and V1B are operating in cascode--that is, as a synthetic tetrode.
> You could replace them with a 6SJ7, suitably wired (connect its
> suppressor grid, G3, to common) and notice little or no difference in
> performance.

>
> For a grounded-grid amplifier that works well at 7 MHz and lower
> frequencies--haven't used it at higher frequencies yet--se e the first
> stage in the two schematics in my page at
> http://dpnwritings.nfshost.com/ej/wr/ . Whatever gain the GG stage
> provides is incidental; its co-primary main functions are (a) to isolate
> the detector from the antenna and (b) to provide a
> dependably-low-impedance antenna input that supports the insertion of
> resistive attenuator networks to bring the antenna noise floor down to a
> level just above the detector noise floor.
>
> Best regards,
>
> Dave
> amateur radio W9BRD

I am not a great fan of undue RF gain.
Dave, your GG design is the one which inspired my thinking,
not least because of its relative simplicity.

Michael
UK

27138. Re: [regenrx] Mk.8

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-06 11:24:08 UTC
From: dulmagedon@...
Topic: 14969 Message: 27138

I agree with Leonard's comments. You can take the value in henries but then what? Has no practical value if you are sitting with a coil and a hank of wire.The more you wind the better you get at it. Soon itis second nature and you just pick up a form and do it. You will be so close it will amaze you. This week I needed a 40M coil on a one inch form. I took my best guess approach and wound it then checked it on my fet GDO with an average value cap across it. (56pf) It was right where I wanted it. surprised even me. I understand the nervousness. Sometimes also the fear instilled by the "overeducated and undernourished" can diswade folks from making a stab but really it is probably the easiest and most fun part of a build. As Leonard said put on too many and you can unwind one or two easily. And remember what worked so you can always do it. Boys have been doing it since Marconi first did the pond hop at Signal Hill. Not really as hard as one might think. I have given what I use to quick calculate before so I wont repeat it. But it does work every time.
I would encourage a try. You may be a natural at it.
donVe3LYX

27139. Re: [regenrx] Mk.8

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-06 12:42:29 UTC
From: Bill Cromwell
Topic: 14969 Message: 27139

Hi Don,

Winding practice is in itself "education" and I have not eaten anything while "making things" (supper excluded). I don't know I would be ragging on 'over-educated' or "undernourished" people if I had lots of hands on 'over-education' while forgetting to eat. In fact, I have been making things since I was about 6 years old and I am appalled at the number of people who do discourage creativity. The leading baloney I hear is "you need a factory" to make those - or three university degrees. We only need a factory to mass produce things. Making one or a few of anything can be done without a factory or a gov't nanny. Just *do* it. I encourage people to do things too.

There are some people who are over educated and have degrees in regen radios and also encourage others to make things.

73,

Bill KU8H

-played with sticks as a child-

On 10/06/2016 07:24 AM, dulmagedon@... [regenrx] wrote:
>
> I agree with Leonard's comments. You can take the value in henries but
> then what? Has no practical value if you are sitting with a coil and a
> hank of wire.The more you wind the better you get at it. Soon itis
> second nature and you just pick up a form and do it. You will be so
> close it will amaze you. This week I needed a 40M coil on a one inch
> form. I took my best guess approach and wound it then checked it on my
> fet GDO with an average value cap across it. (56pf) It was right where
> I wanted it. surprised even me. I understand the nervousness.
> Sometimes also the fear instilled by the "overeducated and
> undernourished" can diswade folks from making a stab but really it is
> probably the easiest and most fun part of a build. As Leonard said put
> on too many and you can unwind one or two easily. And remember what
> worked so you can always do it. Boys have been doing it since Marconi
> first did the pond hop at Signal Hill. Not really as hard as one might
> think. I have given what I use to quick calculate before so I wont
> repeat it. But it does work every time.
> I would encourage a try. You may be a natural at it.
> donVe3LYX
>
>

--
bark less - wag more

27140. Re: [regenrx] Mk.8

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-06 16:52:25 UTC
From: dulmagedon@...
Topic: 14969 Message: 27140

I agree with everything you said.
donVe3LYX

27141. Re: [Bulk] Re: [regenrx] Mk.8

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-06 17:03:54 UTC
From: Leonard Meek
Topic: 14969 Message: 27141

I think the advantage of a tuned cascode amp over a GG amp is increased selectivity. The GG amp does match the low impedance antenna to the detector though, but that can be accomplished in the antenna coil.

Leonard

----- Original Message -----
From: "Michael michael.setaazul@... [regenrx]" <regenrx@yahoogroups.com>
To: <regenrx@yahoogroups.com>
Sent: Wednesday, October 05, 2016 11:12 PM
Subject: Re: [Bulk] Re: [regenrx] Mk.8

>
>
> On 06.10.16 01:45, david.newkirk@... [regenrx] wrote:
>
>> Mike wrote:
>>
>>> I hope you will share your Grounded Grid RF amp with us when you get
>> around
>> to building it. I had thought of doing the same thing until I noticed that
>> V1B is functioning as a GG amp.
>>
>> V1A and V1B are operating in cascode--that is, as a synthetic tetrode.
>> You could replace them with a 6SJ7, suitably wired (connect its
>> suppressor grid, G3, to common) and notice little or no difference in
>> performance.
> ----------
>>
>> For a grounded-grid amplifier that works well at 7 MHz and lower
>> frequencies--haven't used it at higher frequencies yet--se e the first
>> stage in the two schematics in my page at
>> http://dpnwritings.nfshost.com/ej/wr/ . Whatever gain the GG stage
>> provides is incidental; its co-primary main functions are (a) to isolate
>> the detector from the antenna and (b) to provide a
>> dependably-low-impedance antenna input that supports the insertion of
>> resistive attenuator networks to bring the antenna noise floor down to a
>> level just above the detector noise floor.
>>
>> Best regards,
>>
>> Dave
>> amateur radio W9BRD
> ----------
>
> I am not a great fan of undue RF gain.

> Dave, your GG design is the one which inspired my thinking,
> not least because of its relative simplicity.
>
> Michael
> UK
>
>
> ------------------------------------
> Posted by: Michael <michael.setaazul@...>
> ------------------------------------
>
> "In the interest of Regenerating radio's lost art of Regeneration"
> ------------------------------------
>
> Yahoo Groups Links
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>

27142. Re: [regenrx] Mk.8

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-06 18:21:26 UTC
From: Rob
Topic: 14969 Message: 27142

Yep
Just do it.
There is no difference in your garage bench work... or kitchen table...
or factory.
I was a factory worker...machinist... 35 years ago.
All the tools I used in that factory are available now at Harbor Freight
or EBAY or AMAZON.

That job sort of defined my attitude that there is nothing in our
physical world that we touch that
we can't make or fix if we really had to do it ourselves.

http://www.learnmorsecode.com/regenx/choke/index.html

On 10/06/2016 08:42 AM, Bill Cromwell wrcromwell@... [regenrx] wrote:
>
> Hi Don,
>
> Winding practice is in itself "education" and I have not eaten anything
> while "making things" (supper excluded). I don't know I would be ragging
> on 'over-educated' or "undernourished" people if I had lots of hands on
> 'over-education' while forgetting to eat. In fact, I have been making
> things since I was about 6 years old and I am appalled at the number of
> people who do discourage creativity. The leading baloney I hear is "you
> need a factory" to make those - or three university degrees. We only
> need a factory to mass produce things. Making one or a few of anything
> can be done without a factory or a gov't nanny. Just *do* it. I
> encourage people to do things too.
>
> There are some people who are over educated and have degrees in regen
> radios and also encourage others to make things.
>
> 73,
>
> Bill KU8H
>
> -played with sticks as a child-
>
> On 10/06/2016 07:24 AM, dulmagedon@... [regenrx] wrote:
> >
> > I agree with Leonard's comments. You can take the value in henries but
> > then what? Has no practical value if you are sitting with a coil and a
> > hank of wire.The more you wind the better you get at it. Soon itis
> > second nature and you just pick up a form and do it. You will be so
> > close it will amaze you. This week I needed a 40M coil on a one inch
> > form. I took my best guess approach and wound it then checked it on my

> > fet GDO with an average value cap across it. (56pf) It was right where
> > I wanted it. surprised even me. I understand the nervousness.
> > Sometimes also the fear instilled by the "overeducated and
> > undernourished" can diswade folks from making a stab but really it is
> > probably the easiest and most fun part of a build. As Leonard said put
> > on too many and you can unwind one or two easily. And remember what
> > worked so you can always do it. Boys have been doing it since Marconi
> > first did the pond hop at Signal Hill. Not really as hard as one might
> > think. I have given what I use to quick calculate before so I wont
> > repeat it. But it does work every time.
> > I would encourage a try. You may be a natural at it.
> > donVe3LYX
> >
> >
>
> --
> bark less - wag more
>
>

27143. Re: [regenrx] Mk.8

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-06 22:48:43 UTC
From: Charles Moizeau
Topic: 14969 Message: 27143

Yes, but now the quality of those tools is far less, certainly in the case of Harbor Freight, than what you used back then.

Charles

_____
From: regenrx@yahoogroups.com <regenrx@yahoogroups.com> on behalf of Rob roomberg@... [regenrx] <regenrx@yahoogroups.com>
Sent: Thursday, October 6, 2016 2:21 PM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Mk.8

Yep
Just do it.
There is no difference in your garage bench work... or kitchen table... or factory.
I was a factory worker...machinist... 35 years ago.
All the tools I used in that factory are available now at Harbor Freight or EBAY or AMAZON.

That job sort of defined my attitude that there is nothing in our physical world that we touch that
we can't make or fix if we really had to do it ourselves.

http://www.learnmorsecode.com/regenx/choke/index.html

On 10/06/2016 08:42 AM, Bill Cromwell wrcromwell@...<mailto:wrcromwell@...> [regenrx] wrote:

Hi Don,

Winding practice is in itself "education" and I have not eaten anything while "making things" (supper excluded). I don't know I would be ragging on 'over-educated' or "undernourished" people if I had lots of hands on 'over-education' while forgetting to eat. In fact, I have been making things since I was about 6 years old and I am appalled at the number of people who do discourage creativity. The leading baloney I hear is "you need a factory" to make those - or three university degrees. We only need a factory to mass produce things. Making one or a few of anything can be done without a factory or a gov't nanny. Just *do* it. I encourage people to do things too.

There are some people who are over educated and have degrees in regen radios and also encourage others to make things.

73,

Bill KU8H

-played with sticks as a child-

On 10/06/2016 07:24 AM, dulmagedon@...<mailto:dulmagedon@yahoo.ca> [regenrx] wrote:
>
> I agree with Leonard's comments. You can take the value in henries but
> then what? Has no practical value if you are sitting with a coil and a
> hank of wire.The more you wind the better you get at it. Soon itis
> second nature and you just pick up a form and do it. You will be so
> close it will amaze you. This week I needed a 40M coil on a one inch
> form. I took my best guess approach and wound it then checked it on my
> fet GDO with an average value cap across it. (56pf) It was right where
> I wanted it. surprised even me. I understand the nervousness.
> Sometimes also the fear instilled by the "overeducated and
> undernourished" can diswade folks from making a stab but really it is
> probably the easiest and most fun part of a build. As Leonard said put
> on too many and you can unwind one or two easily. And remember what
> worked so you can always do it. Boys have been doing it since Marconi
> first did the pond hop at Signal Hill. Not really as hard as one might
> think. I have given what I use to quick calculate before so I wont
> repeat it. But it does work every time.
> I would encourage a try. You may be a natural at it.
> donVe3LYX
>
>

--
bark less - wag more

27144. Re: [regenrx] RS 2760419?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-06 23:41:16 UTC
From: rhulett1@...
Topic: 27089 Message: 27144

The radio receives AM, SSB, CW using the RS2760419. Its laying on the bench now, so will need to put it into a box to stabilize the tuning cap adjustment. I have in mind then testing several different diodes to see how they compare. I'm using a dip socket to hold the diode.

73, Curt KB5JO

27145. Re: [Bulk] Re: [regenrx] Mk.8

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-07 02:11:58 UTC
From: david.newkirk@...
Topic: 14969 Message: 27145

Leonard wrote:

> I think the advantage of a tuned cascode amp over a GG amp is increased selectivity. The GG amp does match the low impedance antenna to the detector though, but that can be accomplished in the antenna coil.

Yes, tuning will impart more selectivity than no tuning. :-)

But you won't hear any affect attributable to the additional selectivity added by the cascode's tuned input unless signals far enough off channel to be knocked down by that broad additional selectivity are overloading your detector so badly that they audibly mar reception. (And again: There's no value to using a cascode there aside from it being a cool use of a dual triode. An RF pentode--say, another 6SJ7--will give the same performance at MF and at least the lower 2/3 of the HF. Only at the upper HFs and above may the somewhat quieter performance of the cascode be noticeably more useful--and that will be pretty much be only for CW/SSB reception, as you won't hear a quieter noise floor of you're using your regen in non-oscillating mode to receive AM.)

What a regen does _not_ need is gain between it and its antenna, as I describe in my 7120-kHz-receiver page. Hence my satisfaction with the GG amplifier and the addition of 15 to 18 dB of attenuation between the GG stage and my antenna system.

As to the issue of input selectivity and the grounded-grid amplifier, once you've brought your receiver's input impedance down to a level on the order of 50 to 75 ohms, you're set to insert all sorts of modern filtering in there. A two-tuned-circuit, "no tune" filter is an obvious choice; I have switchable 80- and 40-meter such filters built into a Snickers tin that I can put in front of my 80- and 40-meter regens, but so resistant are those receivers to overloading that I never need additional filtering even though I use my ham transmitting antenna for reception. (For an overview of what such filters are about, see this article cadged from _QST_ with poor attribution: http://www.robkalmeijer.nl/techniek/electronica/radiotechniek/hambladen/qst/1991/12/page29/index.html http://www.robkalmeijer.nl/techniek/electronica/radiotechniek/hambladen/qst/1991/12/page29/index.html . Some guy named me edited that article for publication way back when, so you'll see my name as author of one of its sidebars. (I especially like Zack Lau's 8-kHz-wide filter for 80 meters...)

Best regards,

Dave
amateur radio W9BRD

27146. Re: [regenrx] Mk.8 coil winding

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-07 02:37:08 UTC
From: Rob
Topic: 14969 Message: 27146

I don't understand this bashing of the quality of Harbor Freight tools.

Perhaps you need something special. Not me.
I have walked into Harbor Freight and picked up a canvas tool bag and walked
around the store picking up screw drivers and wrenches and pliers and allen wrenches and filled that bag with tools
that added up to $40 and labeled it BIKE TOOLS so my kids and grandchildren didn't walk off
(ride off) with my tools from other toolboxes.

That same collection of tools would have cost me $200 at SEARS or LOWES.

We were talking about winding coils...making parts not so readily available now....

I said there is no difference in your garage bench work... or kitchen table... or factory......
when it comes to something as straight forward as winding a coil.....
the tools aren't so special.....
you can even get them at Walmart.

YOU CAN GET THE WIRE AT WALMART
http://www.learnmorsecode.com/rfcoil/index.html

I always had a problem with the mystery of measuring inductance.
I never had a grid dip meter so last year I bought a digital multi meter that did inductance.
Digital inductance meters now cost between $15 and $30 so there really is nothing under the hood
we can't measure in radio circuits now.

On 10/06/2016 06:48 PM, Charles Moizeau w2sh@... [regenrx] wrote:
>
> Yes, but now the quality of those tools is far less, certainly in the
> case of Harbor Freight, than what you used back then.
>
>
> Charles
>
>
> Yep
> Just do it.
> There is no difference in your garage bench work... or kitchen
> table... or factory.
> I was a factory worker...machinist... 35 years ago.
> All the tools I used in that factory are available now at Harbor

> Freight or EBAY or AMAZON.
>
> That job sort of defined my attitude that there is nothing in our
> physical world that we touch that
> we can't make or fix if we really had to do it ourselves.
>
>
>
> http://www.learnmorsecode.com/regenx/choke/index.html
>
> On 10/06/2016 08:42 AM, Bill Cromwell wrcromwell@... [regenrx]
> wrote:
>>
>> Hi Don,
>>
>> Winding practice is in itself "education" and I have not eaten anything
>> while "making things" (supper excluded). I don't know I would be ragging
>> on 'over-educated' or "undernourished" people if I had lots of hands on
>> 'over-education' while forgetting to eat. In fact, I have been making
>> things since I was about 6 years old and I am appalled at the number of
>> people who do discourage creativity. The leading baloney I hear is "you
>> need a factory" to make those - or three university degrees. We only
>> need a factory to mass produce things. Making one or a few of anything
>> can be done without a factory or a gov't nanny. Just *do* it. I
>> encourage people to do things too.
>>
>> There are some people who are over educated and have degrees in regen
>> radios and also encourage others to make things.
>>
>> 73,
>>
>> Bill KU8H
>>
>> -played with sticks as a child-
>>
>> On 10/06/2016 07:24 AM, dulmagedon@... [regenrx] wrote:
>> >
>> > I agree with Leonard's comments. You can take the value in henries but
>> > then what? Has no practical value if you are sitting with a coil and a
>> > hank of wire.The more you wind the better you get at it. Soon itis
>> > second nature and you just pick up a form and do it. You will be so
>> > close it will amaze you. This week I needed a 40M coil on a one inch
>> > form. I took my best guess approach and wound it then checked it on my
>> > fet GDO with an average value cap across it. (56pf) It was right where
>> > I wanted it. surprised even me. I understand the nervousness.
>> > Sometimes also the fear instilled by the "overeducated and
>> > undernourished" can diswade folks from making a stab but really it is
>> > probably the easiest and most fun part of a build. As Leonard said put
>> > on too many and you can unwind one or two easily. And remember what
>> > worked so you can always do it. Boys have been doing it since Marconi

>> > first did the pond hop at Signal Hill. Not really as hard as one might
>> > think. I have given what I use to quick calculate before so I wont
>> > repeat it. But it does work every time.
>> > I would encourage a try. You may be a natural at it.
>> > donVe3LYX
>> >
>> >
>>
>> --
>> bark less - wag more
>>
>
>

27147. Re: [regenrx] Mk.8

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-07 02:59:49 UTC
From: david.newkirk@...
Topic: 14969 Message: 27147

Don wrote:

> You can take the value in henries but then what? Has no practical value if you are sitting with a coil and a hank of wire.

Yes, what _is_ this devilry of actually finding stuff out and then applying that knowledge to obtain a predictable result? Why aren't we _all_ happy with starting our cars like Fred Flintstone?

For those interested in knowing a bit more what they're doing in addition to just doing what they already know, here's a basic how-to about determining "how many turns" for a shortwave coil when an article doesn't give you that information.

Two online calculators will get us there. First, though, for those wanting PDFs of those various RCA tube manuals, you can get them from the tubebooks.org subpage at http://tubebooks.org/tube_data.htm http://tubebooks.org/tube_data.htm . The 1948 (RC15) edition of the _RCA Receiving Tube Manual_ includes an "AC Operated Shortwave Receiver" on page 220.

Now this article throws us the curve ball of specifying only a tuning capacitance (140 uuF, or 140 pF) for its tuned circuits. (This worked back when that article was published because you could go into any radio catalog--or radio store--and find ready-made RF coils specified to be used with such-and-such tuning capacitance.) But knowing that, we _can_ figure out coil specs for a first try.

So the first thing we do is assume that we have 130 pF, not 140 pF, just to make sure we've built in some leeway hitting resonance with whatever 140-pF-ish capacitance we happen to use.

And then we decide the lower end of the range we want to cover. Considering that the lowest international shortwave band with much action is the 6 MHz band. we'll make our radio start tuning right at 6 MHz.

What inductance--how many microhenries?--might that require for resonance with 130 pF? An online calculator capable of determining resonance from either angle--L or C--can help: http://toroids.info/T200-2.php http://toroids.info/T200-2.php . This happens to a calculator set up to find turns for a particular toroidal core, but as we use it we're also given _generic_ L and C information that will give us what we need.

So in that page we type 6 in the MHz box and 130 in the pF box, and press Calc. And we're informed that we need a 5.4-microhenry coil.

Now, assuming we don't want to use a toroidal core, we next want to know how many turns to wind on a pill bottle to get that inductance.

The calculator at http://www.crystalradio.net/cal/indcal.shtml http://www.crystalradio.net/cal/indcal.shtml can help us. Its "Solve for Turns" features seems to be broken, but we can use its default "Inductance" setting to do a bit of cut and

try.

We leave Solve set to Turns; type 1.125 into Coil Diameter; type a trial value into Turns (let's try 10); type a Winding Length (a length equal to the coil diameter is a best practice for technical reasons, so let's try 1.125 there, too); and then click Solve.

Huh, 1.93 uH. Too little. So we bump Turns up to 20 and Solve again. Hmm, a bit over 7 uH. Hey, we can get 5.6 uH with 17 turns. That's close enough to 5.4 uH for fun, and we will certainly hit 6 MHz with 130 pF with that coil. If we want to fiddle further, we can increase the winding length a bit to bring 16 turns to exactly 5.4 uH.

That's maybe ten minutes to figure out how many turns of wire we need to hit a certain frequency with a certain capacitor and a certain coil form.

Best regards,

Dave
amateur radio W9BRD

27148. Re: [regenrx] Mk.8

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-07 03:02:36 UTC
From: david.newkirk@...
Topic: 14969 Message: 27148

Oopsie, my first-draft-before-finding-out-the-calculator-was-busted-for-L

> We leave Solve set to Turns

should be

"We leave Solve set for Inductance."

Best regrades,

Dave
amateur radio W9BRD

27149. Re: [regenrx] Mk.8

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-07 03:48:22 UTC
From: Rob
Topic: 14969 Message: 27149

thank you

On 10/06/2016 11:02 PM, david.newkirk@... [regenrx] wrote:
>
> Oopsie, my first-draft-before-finding-out-the-calculator-was-busted-for-L
>
>
> > We leave Solve set to Turns
>
> should be
>
> "We leave Solve set for Inductance."
>
> Best regrades,
>
> Dave
> amateur radio W9BRD
> & nbsp;
>

27150. how wide PCB traces can withstand 8 AMPs experiment

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-07 03:58:18 UTC
From: Rob
Topic: 27150 Message: 27150

how wide PCB traces can withstand 8 AMPs experiment

Working on how to control heaters for PCB toner transfer I
wasn't sure how to make the traces behave less like a fuse.
Pictures:
http://www.learnmorsecode.com/tracetest/index.html

27151. Re: how wide PCB traces can withstand 8 AMPs experiment

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-07 04:03:07 UTC
From: les.au49@...
Topic: 27150 Message: 27151

Hello Rob,

I looked in my files and found this:

PCB Track width Vs Current Rating

Current width in inches
0.5A .008"
0.75A .012"
1.25A .020"
2.5A .050"
4.0A .100"
7.0A .200"
10.0A .325

However, I don't know if this applies to 1 ounce or 2 ounce copper clad board.

I'll look some more ....

Les

27152. Re: how wide PCB traces can withstand 8 AMPs experiment

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-07 04:09:09 UTC
From: les.au49@...
Topic: 27150 Message: 27152

Hello Rob,

At least one source for the info I sent was a tutorial provided by David L Jones, PCB Design Tutorial.
He refers readers of that tutorial to www dot alternatezone dot com for the latest copy.

And in that table Mr. Jones gives the track width for both 1 ounce and 2 ounce copper clad board, and I can say that the figures you saw in my last posting apply to 1 ounce copper. If you use 2 ounce copper the track width can be halved.

I believe this info will help you!

Leslie

27153. Re: [Bulk] Re: [regenrx] Mk.8

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-07 04:41:33 UTC
From: Leonard Meek
Topic: 14969 Message: 27153

Very interesting. I've seen this on many circuits in the Handbooks. I think I'll study up on it.

Leonard

----- Original Message -----
From: david.newkirk@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Thursday, October 06, 2016 4:11 PM
Subject: Re: [Bulk] Re: [regenrx] Mk.8

Leonard wrote:

> I think the advantage of a tuned cascode amp over a GG amp is increased selectivity. The GG amp does match the low impedance antenna to the detector though, but that can be accomplished in the antenna coil.

Yes, tuning will impart more selectivity than no tuning. :-)

But you won't hear any affect attributable to the additional selectivity added by the cascode's tuned input unless signals far enough off channel to be knocked down by that broad additional selectivity are overloading your detector so badly that they audibly mar reception. (And again: There's no value to using a cascode there aside from it being a cool use of a dual triode. An RF pentode--say, another 6SJ7--will give the same performance at MF and at least the lower 2/3 of the HF. Only at the upper HFs and above may the somewhat quieter performance of the cascode be noticeably more useful--and that will be pretty much be only for CW/SSB reception, as you won't hear a quieter noise floor of you're using your regen in non-oscillating mode to receive AM.)

What a regen does _not_ need is gain between it and its antenna, as I describe in my 7120-kHz-receiver page. Hence my satisfaction with the GG amplifier and the addition of 15 to 18 dB of attenuation between the GG stage and my antenna system.

As to the issue of input selectivity and the grounded-grid amplifier, once you've brought your receiver's input impedance down to a level on the order of 50 to 75 ohms, you're set to insert all sorts of modern filtering in there. A two-tuned-circuit, "no tune" filter is an obvious choice; I have switchable 80- and 40-meter such filters built into a Snickers tin that I can put in front of my 80- and 40-meter regens, but so resistant are those receivers to overloading that I never need additional filtering even though I use my ham transmitting antenna for reception. (For an overview of what such filters are about, see this article cadged from _QST_ with poor attribution: http://www.robkalmeijer.nl/techniek/electronica/radiotechniek/hambladen/qst/1991/12/page29/index.html . Some guy named me edited that article for publication way back when, so you'll see my name as author of one of its sidebars. (I especially like Zack Lau's 8-kHz-wide filter for 80 meters...)

Best regards,

Dave

amateur radio W9BRD

27154. Re: [regenrx] Mk.8

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-07 17:21:00 UTC
From: Leonard Meek
Topic: 14969 Message: 27154

I'm not real computer savvy, but I was able to enter the formulas for resonance, inductance, etc. into an Excel spreadsheet. So all I need to do is enter two parameters and it calculates the third. I use my sig gen and freq counter to ring a coil with a known cap, then plug in the freq where the signal peaks on a scope or VTVM, and it gives me the inductance. Every time I find a new formula for something, I enter it into my spreadsheet. I also have a free program called "Elcad" the does a lot of the calculations, including coil turns and conversions.

Leonard
----- Original Message -----
From: david.newkirk@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Thursday, October 06, 2016 4:59 PM
Subject: Re: [regenrx] Mk.8

Don wrote:

> You can take the value in henries but then what? Has no practical value if you are sitting with a coil and a hank of wire.

Yes, what _is_ this devilry of actually finding stuff out and then applying that knowledge to obtain a predictable result? Why aren't we _all_ happy with starting our cars like Fred Flintstone?

For those interested in knowing a bit more what they're doing in addition to just doing what they already know, here's a basic how-to about determining "how many turns" for a shortwave coil when an article doesn't give you that information.

Two online calculators will get us there. First, though, for those wanting PDFs of those various RCA tube manuals, you can get them from the tubebooks.org subpage at http://tubebooks.org/tube_data.htm . The 1948 (RC15) edition of the _RCA Receiving Tube Manual_ includes an "AC Operated Shortwave Receiver" on page 220.

Now this article throws us the curve ball of specifying only a tuning capacitance (140 uuF, or 140 pF) for its tuned circuits. (This worked back when that article was published because you could go into any radio catalog--or radio store--and find ready-made RF coils specified to be used with such-and-such tuning capacitance.) But knowing that, we _can_ figure out coil specs for a first try.

So the first thing we do is assume that we have 130 pF, not 140 pF, just to make sure we've built in some leeway hitting resonance with whatever 140-pF-ish capacitance we happen to use.

And then we decide the lower end of the range we want to cover. Considering that the lowest international shortwave band with much action is the 6 MHz band. we'll make our radio start tuning right at 6 MHz.

What inductance--how many microhenries?--might that require for resonance with 130 pF? An online calculator capable of determining resonance from either angle--L or C--can help: http://toroids.info/T200-2.php . This happens to a calculator set up to find turns for a particular toroidal core, but as we use it we're also given _generic_ L and C information that will give us what we need.

So in that page we type 6 in the MHz box and 130 in the pF box, and press Calc. And we're informed that we need a 5.4-microhenry coil.

Now, assuming we don't want to use a toroidal core, we next want to know how many turns to wind on a pill bottle to get that inductance.

The calculator at http://www.crystalradio.net/cal/indcal.shtml can help us. Its "Solve for Turns" features seems to be broken, but we can use its default "Inductance" setting to do a bit of cut and try.

We leave Solve set to Turns; type 1.125 into Coil Diameter; type a trial value into Turns (let's try 10); type a Winding Length (a length equal to the coil diameter is a best practice for technical reasons, so let's try 1.125 there, too); and then click Solve.

Huh, 1.93 uH. Too little. So we bump Turns up to 20 and Solve again. Hmm, a bit over 7 uH. Hey, we can get 5.6 uH with 17 turns. That's close enough to 5.4 uH for fun, and we will certainly hit 6 MHz with 130 pF with that coil. If we want to fiddle further, we can increase the winding length a bit to bring 16 turns to exactly 5.4 uH.

That's maybe ten minutes to figure out how many turns of wire we need to hit a certain frequency with a certain capacitor and a certain coil form.

Best regards,

Dave
amateur radio W9BRD

27155. N1TEV Charles Kitchin's A Simple Regen Radio for Beginners pictures and notes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-07 17:29:22 UTC
From: Rob
Topic: 27155 Message: 27155

I put the
N1TEV Charles Kitchin's A Simple Regen Radio for Beginners
as JPG pictures here because the PDFs are tripping up following this
project:

http://www.learnmorsecode.com/kitchin/index.html

On 10/07/2016 06:50 AM, Curt wrote:
> It's N1TEV Charles Kitchin's "A Simple Regen Radio for Beginners" QST
> Sept 2000. I still need to package it to improve stability, it's
> spread on the bench right now.
>
> ----- Original Message -----
> *From:* Rob <mailto:roomberg@...>
> *To:* Curt <mailto:rhulett1@...>
> *Sent:* Thursday, October 06, 2016 9:43 PM
> *Subject:* which radio is on the bench
>
> so many posts.... sort of lost which radio ... schematic?
>

27156. Re: [regenrx] N1TEV Charles Kitchin's A Simple Regen Radio for Beginners pictures and notes

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-07 19:29:08 UTC
From: Michael
Topic: 27155 Message: 27156

I have read a wide range of comment on this unorthodox
Kitchin design. The floating diode kinda defies physics.
However, some report good results. I deduce leakage and lucky-dip
selection of the germanium diode might explain the disparity.

I have yet to try it myself, but could be re-motivated by
postings from empirical converts ...

Michael

On 07.10.16 18:29, Rob roomberg@... [regenrx] wrote:
..
> I put the N1TEV Charles Kitchin's A Simple Regen Radio
> for Beginners as JPG pictures here ...

27157. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-08 15:12:20 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 27157

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /AC2Q/455 osc sch.jpg
Uploaded by : kf8zn <kf8zn@...>
Description : My 1st scratch built Oscillator Homebrewed in a Hotel while on business

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/AC2Q/455%20osc%20sch.jpg

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

kf8zn <kf8zn@...>

27158. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-08 15:12:51 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 27158

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /AC2Q/colpitss 455 output.jpg
Uploaded by : kf8zn <kf8zn@...>
Description : Why is it distorted??

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/AC2Q/colpitss%20455%20output.jpg

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

kf8zn <kf8zn@...>

27159. My 1st Scratch Built Oscillator, help appreciated!!!

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-08 15:14:09 UTC
From: kf8zn@...
Topic: 27159 Message: 27159

Hello,
Mike, AC2Q here.

Just built my 1st scratch oscilator, and while it works, and reasonably on frequency, (YES!!) there are issues I am hoping for input about.

See photos of schematic and waveform output in files section "AC2Q"

Q: Is the output distorted because it is harmonic rich, OR is it harmonic rich because it's distorted?

So is the issue more likely one requiring filtering, or is it a bias or tuned circuit issue?

Any Help Appreciated!

Mike

27160. Re: My 1st Scratch Built Oscillator, help appreciated!!!

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-08 15:41:29 UTC
From: b_weeber@...
Topic: 27159 Message: 27160

Second one: It is harmonic rich because it's distorted. This happen, because the transistor is not amplifying a continous signal, but switching on and off. If you check the wave form on top of the coil, there it will almost look like a sine wave.
Many of that coils contain a second coupling coil, from where you can get the same nice wave form. While the amplitude is smaller, the coupling coil can drive a load.

27161. Re: [regenrx] My 1st Scratch Built Oscillator, help appreciated!!! 455 535

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-08 15:34:59 UTC
From: Rob
Topic: 27159 Message: 27161

I don't have answers to your harmonics question....
but
I was wondering what will this 455 kHz be used in?
and
does it tune up to 535kHz broadcast band AM radio?

On 10/08/2016 11:14 AM, kf8zn@... [regenrx] wrote:
>
>
> Hello,
> Mike, AC2Q here.
>
> Just built my 1st scratch oscilator, and while it works, and
> reasonably on frequency, (YES!!) there are issues I am hoping for
> input about.
>
> See photos of schematic and waveform output in files section "AC2Q"
>
> Q: Is the output distorted because it is harmonic rich, OR is it
> harmonic rich because it's distorted?
>
> So is the issue more likely one requiring filtering, or is it a bias
> or tuned circuit issue?
>
> Any Help Appreciated!
>
> Mike
>
>
>

27162. Re: [regenrx] My 1st Scratch Built Oscillator, help appreciated!!! 455 535

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-08 16:56:26 UTC
From: kf8zn@...
Topic: 27159 Message: 27162

Rob,
It will be used as a BFO, (Beat Frequency Oscillator) for my Zenith Transoceanic 3000

Mike

27163. moc3020 triac driver

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-09 01:54:09 UTC
From: Rob
Topic: 27163 Message: 27163

The goal is control 8 amp hot plate or laminator heaters.
based on just one of the two heating elements in this circuit
http://www.learnmorsecode.com/help/triac/triaccontrol.jpg

this circuit runs a 100 watt light bulb without burning anything on the
board.
yippeeeeee
http://www.learnmorsecode.com/laminator/pic/triacperf.jpg
good triac test.
First triac I ever used.

27164. Re: My 1st Scratch Built Oscillator, help appreciated!!!

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-09 09:54:32 UTC
From: b_weeber@...
Topic: 27159 Message: 27164

Hello Mike

Everything is perfect. You don't need a filter nor a buffer. Just place the red output cable close to the radio's detector circuit. Sometimes it is good enough, to fix it with sticky tape on the backsite of the radio.

Bernd

27165. BFO

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-09 12:08:08 UTC
From: dulmagedon@...
Topic: 27165 Message: 27165

I have been playing with BFOs added to older radios (late 1930s floor model with SW) James H gave me some good tips on how it was done in the S-38 and some National sets that did not have a BFO proper so I have spent the last few weeks playing with that idea in many forms. It is surprising how easy it is to do so the tip of putting the output of your osc nearby will for sure do it. Killing the AVC helps even more. And I am impressed on your build of it too. May it be the first of many osc to come from your bench.
donVe3LYX
Maybe we need a new TV show called "Solder Wars!"

27166. Re: [regenrx] BFO

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-09 14:01:19 UTC
From: tbs50a@...
Topic: 27165 Message: 27166

Hi Don,
What I've done in the past if the set has the older double ended tubes is slip a piece of wire under the IF amp's grid cap and wrap a few turns around the glass tube. This wire causes feedback from the grid to the plate and make the IF oscillate, instant bfo. Tape the loose end to the the bakelite base.

Terry N3GTE

-----Original Message-----
From: dulmagedon@... [regenrx] <regenrx@yahoogroups.com>
To: regenrx <regenrx@yahoogroups.com>
Sent: Sun, Oct 9, 2016 8:08 am
Subject: [regenrx] BFO

I have been playing with BFOs added to older radios (late 1930s floor model with SW) James H gave me some good tips on how it was done in the S-38 and some National sets that did not have a BFO proper so I have spent the last few weeks playing with that idea in many forms. It is surprising how easy it is to do so the tip of putting the output of your osc nearby will for sure do it. Killing the AVC helps even more. And I am impressed on your build of it too. May it be the first of many osc to come from your bench.
donVe3LYX

Maybe we need a new TV show called "Solder Wars!"

27167. RE: [regenrx] moc3020 triac driver

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-09 14:41:13 UTC
From: Larry
Topic: 27163 Message: 27167

Rob, Just remember the triac has a lot less sensitivity at low temperatures. Should you ever have to work at low temperatures.

Larry

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Saturday, October 08, 2016 9:54 PM
To: regenrx@yahoogroups.com
Subject: [regenrx] moc3020 triac driver

The goal is control 8 amp hot plate or laminator heaters.
based on just one of the two heating elements in this circuit
http://www.learnmorsecode.com/help/triac/triaccontrol.jpg

this circuit runs a 100 watt light bulb without burning anything on the board.
yippeeeeee
http://www.learnmorsecode.com/laminator/pic/triacperf.jpg
good triac test.
First triac I ever used.

27168. Re: [regenrx] BFO

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-09 18:07:08 UTC
From: dulmagedon@...
Topic: 27165 Message: 27168

Yes that would work. I tried feedback from the 6k7 grid wire to the cathode with a witch in between. It worked but I wasn't completely happy with it so I put an insulated loop around the plate pin and plugged the tube back in and put a small amount of wire over the 6k7 grid lead. that worked well and I could switch it on and off just like a real radio. (Com rec) Some of those old sets have really good performance. On that one I had the switch mounted on a bracket right at the tube and it was a big switch so parts are far enough away to stop feedback. I tried it on my Sparton 1939 set but with the switch on the front panel but too much wire so I couldn't switch it off. So I had BFO always. It works best on my GE 1935-36 set. The reason in case you are wondering was for experiments with the spy adapter set. CW was a problem so i assumed perhaps MCW was used (and it probably was then James gave me this info and I spent about two weeks with two of my old sets trying everything I could think of. As you know and obviously knew about it long before my recent discovery while it might not be perfect it certainly would allow one to operate with ease in CW mode using an old parlour set. now i wonder did any hams operate in that fashion back in the 1930s and 1940s. I think some must have as not everyone could afford a com rec or had the where with all to build a real radio (regen). Speaking of which this afternoon I plan to convert my twin 26 regen from an 80M Armstrong to a 40M Hartley based regen.
donVe3LYX

27169. Re: [regenrx] BFO

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-09 18:38:07 UTC
From: tbs50a@...
Topic: 27165 Message: 27169

I did it to an Atwater Kent 206 I had back in the '70's. I think it had a 58 tube for the IF amp, three band and a RF stage. Pretty good set from what I can remember.
26 tube eeeckkkkk Eats up a lot of filament current. I wonder how they came up with 1.5v filament? 2.5v, 5v, or 6v would be much more manageable.

Cheers
Terry N3GTE

-----Original Message-----
From: dulmagedon@... [regenrx] <regenrx@yahoogroups.com>
To: regenrx <regenrx@yahoogroups.com>
Sent: Sun, Oct 9, 2016 2:07 pm
Subject: Re: [regenrx] BFO

Yes that would work. I tried feedback from the 6k7 grid wire to the cathode with a witch in between. It worked but I wasn't completely happy with it so I put an insulated loop around the plate pin and plugged the tube back in and put a small amount of wire over the 6k7 grid lead. that worked well and I could switch it on and off just like a real radio. (Com rec) Some of those old sets have really good performance. On that one I had the switch mounted on a bracket right at the tube and it was a big switch so parts are far enough away to stop feedback. I tried it on my Sparton 1939 set but with the switch on the front panel but too much wire so I couldn't switch it off. So I had BFO always. It works best on my GE 1935-36 set. The reason in case you are wondering was for experiments with the spy adapter set. CW was a problem so i assumed perhaps MCW was used (and it probably was then James gave me this info and I spent about two weeks with two of my old sets try ing everything I could think of. As you know and obviously knew about it long before my recent discovery while it might not be perfect it certainly would allow one to operate with ease in CW mode using an old parlour set. now i wonder did any hams operate in that fashion back in the 1930s and 1940s. I think some must have as not everyone could afford a com rec or had the where with all to build a real radio (regen). Speaking of which this afternoon I plan to convert my twin 26 regen from an 80M Armstrong to a 40M Hartley based regen.
donVe3LYX

27170. Re: [regenrx] BFO

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-09 23:02:44 UTC
From: dulmagedon@...
Topic: 27165 Message: 27170

For sure! When I went to test it the 1.5v was pretty well dead although I did mange to get a squeal. I whimped out and just rewound the coil for 40M instead of changing to a Hartley. It is not one of my best sets. I had the two tubes and too much time on my hands probably. It matches my 40M TNT so I figured it should at least do 40M. I like to use the full vintage station set ups for events like the Bruce Kelly.
donVe3LYX

27171. Re: [regenrx] BFO

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-09 23:42:56 UTC
From: tbs50a@...
Topic: 27165 Message: 27171

My friend sez a 26 is a 1.5v 01toob.

Terry N3GTE

-----Original Message-----
From: dulmagedon@... [regenrx] <regenrx@yahoogroups.com>
To: regenrx <regenrx@yahoogroups.com>
Sent: Sun, Oct 9, 2016 7:02 pm
Subject: Re: [regenrx] BFO

For sure! When I went to test it the 1.5v was pretty well dead although I did mange to get a squeal. I whimped out and just rewound the coil for 40M instead of changing to a Hartley. It is not one of my best sets. I had the two tubes and too much time on my hands probably. It matches my 40M TNT so I figured it should at least do 40M. I like to use the full vintage station set ups for events like the Bruce Kelly.
donVe3LYX

27172. Interim Report: McMurdo-Silver 801 Receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-10 00:32:31 UTC
From: Richard
Topic: 27172 Message: 27172
Attachments: 1 described; binary payloads are missing from this source WARC

Well, the cabinet was rusted all over, so I cleaned and painted it, and it came out pretty good.

Inside all was grungy as it had been very wet. I replaced nearly all the resistors and capacitors, and it came to life, but not very satisfactorily. Audio seemed low, it very easily overloaded, and the notes were raspy. You have to operate with a very small coupling capacitor as there is no RF gain control.

An interesting design feature is the detector tuning capacitor floats at B+ voltage. The tuning coil has the capacitor connected across about 60% of the winding, and is bypassed at that point, and the end of the coil connects to the RF amplifier plate, giving transformer coupling. (see schematic attached) The input coil is identical, with a 500 Ohm resistor in series to load the tuned circuit to broaden response to make tuning easy, and also to reduce gain, which we don't need. I increased the detector plate load resistor, R5, from 50K to 100K which increased audio, and increased the grid leak resistor, R6, from 150K to 1 Meg with improvement. Also the 500 Ohm loading resistor on the input tank seems too high as it didn't seem to tune at all. DC on the heaters seems to be an improvement, but it's still raspy.

Seven sets of coils were available covering 430 Kc through 63 Mc, but note they are all general coverage, and the ham bands occupy only a few divisions. It has an 8:1 gear drive, which is promising, but after much futzing it still has some lost motion.

So, the saga continues. I may try making some MF coils using old IF transformers, on the other hand I think I can make a better one. (But, it's a very good looking receiver...)

Richard, AA1P

27173. Re: [regenrx] BFO

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-10 04:27:39 UTC
From: Leonard Meek
Topic: 27165 Message: 27173

But I think the filament is rated for AC.

Leonard

----- Original Message -----
From: tbs50a@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Sunday, October 09, 2016 1:42 PM
Subject: Re: [regenrx] BFO

My friend sez a 26 is a 1.5v 01toob.

Terry N3GTE

-----Original Message-----
From: dulmagedon@... [regenrx] <regenrx@yahoogroups.com>
To: regenrx <regenrx@yahoogroups.com>
Sent: Sun, Oct 9, 2016 7:02 pm
Subject: Re: [regenrx] BFO

For sure! When I went to test it the 1.5v was pretty well dead although I did mange to get a squeal. I whimped out and just rewound the coil for 40M instead of changing to a Hartley. It is not one of my best sets. I had the two tubes and too much time on my hands probably. It matches my 40M TNT so I figured it should at least do 40M. I like to use the full vintage station set ups for events like the Bruce Kelly.
donVe3LYX

27174. Re: [regenrx] Interim Report: McMurdo-Silver 801 Receiver [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-10 04:35:51 UTC
From: tbs50a@...
Topic: 27174 Message: 27174

Hi Richard,
I've got the 802 it's a superhet with a regen det at the IF. Very full featured for a inexpensive little set. Here's a few pics:
https://www.flickr.com/photos/42774321@N08/3941807500/in/dateposted/
Have had it for a number of yrs but haven't gotten around to winding some coils for it. It too has an interesting tuning cap too...
GL and keep us in the group posted on your progress!

Terry N3GTE

-----Original Message-----
From: Richard brunneraa1p@... [regenrx] <regenrx@yahoogroups.com>
To: regenrx <regenrx@yahoogroups.com>
Sent: Sun, Oct 9, 2016 8:32 pm
Subject: [regenrx] Interim Report: McMurdo-Silver 801 Receiver [1 Attachment]

Well, the cabinet was rusted all over, so I cleaned and painted it, and
it came out pretty good.

Inside all was grungy as it had been very wet. I replaced nearly all
the resistors and capacitors, and it came to life, but not very
satisfactorily. Audio seemed low, it very easily overloaded, and the
notes were raspy. You have to operate with a very small coupling
capacitor as there is no RF gain control.

An interesting design feature is the detector tuning capacitor floats at
B+ voltage. The tuning coil has the capacitor connected across about
60% of the winding, and is bypassed at that point, and the end of the
coil connects to the RF amplifier plate, giving transformer coupling.
(see schematic attached) The input coil is identical, with a 500 Ohm
resistor in series to load the tuned circuit to broaden response to make
tuning easy, and also to reduce gain, which we don't need. I increased
the detector plate load resistor, R5, from 50K to 100K which increased
audio, and increased the grid leak resistor, R6, from 150K to 1 Meg with
improvement. Also the 500 Ohm loading resistor on the input tank seems
too high as it didn't seem to tune at all. DC on the heaters seems to
be an improvement, but it's still raspy.

Seven sets of coils were available covering 430 Kc through 63 Mc, but
note they are all general coverage, and the ham bands occupy only a few
divisions. It has an 8:1 gear drive, which is promising, but after much
futzing it still has some lost motion.

So, the saga continues. I may try making some MF coils using old IF
transformers, on the other hand I think I can make a better one. (But,

it's a very good looking receiver...)

Richard, AA1P

27175. Re: [regenrx] BFO

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-10 04:41:32 UTC
From: tbs50a@...
Topic: 27165 Message: 27175

Yeah at little better than an amp of current. That would kill your D cell in a hurry.

Terry N3GTE

-----Original Message-----
From: 'Leonard Meek' lemeek@... [regenrx] <regenrx@yahoogroups.com>
To: regenrx <regenrx@yahoogroups.com>
Sent: Mon, Oct 10, 2016 12:27 am
Subject: Re: [regenrx] BFO

☐
But I think the filament is rated for AC.

Leonard

----- Original Message -----

From: tbs50a@... [regenrx]

To: regenrx@yahoogroups.com

Sent: Sunday, October 09, 2016 1:42 PM

Subject: Re: [regenrx] BFO

My friend sez a 26 is a 1.5v 01toob.

Terry N3GTE

-----Original Message-----
From: dulmagedon@... [regenrx] <regenrx@yahoogroups.com>
To: regenrx <regenrx@yahoogroups.com>
Sent: Sun, Oct 9, 2016 7:02 pm
Subject: Re: [regenrx] BFO

For sure! When I went to test it the 1.5v was pretty well dead although I did mange to get a squeal. I whimped out and just rewound the coil for 40M instead of changing to a Hartley. It is not one of my best sets. I had the two tubes and too much time on my hands probably. It matches my 40M TNT so I figured it should at least do 40M. I like to use the full vintage station set ups for events like the Bruce Kelly.
donVe3LYX

27176. Re: [regenrx] BFO

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-10 08:30:44 UTC
From: dulmagedon@...
Topic: 27165 Message: 27176

If it is a 1.5 volt 01 someone hurt it when they designed it. 01s will stand anything. These are finicky. I would not use them again and could just pop the 01s in and up the voltage and be done with it but my heritage wont allow that. I must complete it. So what I did was buy a normal 6 volt lantern battery which has four 1.5 volt cells inside. I took it apart and flipped the cells and rewired it so they were all hooked parallel giving 1.5 volts with grunt. It has lasted over a year of causal listening and is just now going south. I didnt use it a lot. Perhaps once every week for 15 minutes or so. I use a bunch of 9 volts standing in a rack at the back for B power and it has worked. Just since it matches the TNT and the TNT is now on 40M (with its notorious loop modulation still installed) I felt i should put "The Twins " back in business together. Not every build has to be the ultimate. sometimes it is fun and educational to explore an idea by building it. Since it takes only a day or so of time and is fun that is how I learn. If it works to a usable level i leave it built. If a disaster I repurpose the parts. This works good enough to use so it gets to live.
donVe3LYX

27177. Re: BFO

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-10 17:00:26 UTC
From: Bry Carling
Topic: 27165 Message: 27177

Hi Don,

If anyone is interested in experimenting with BFO add-ons, we do stock some 455 KHz crystals
(hc6u format) and sockets for same, at:

http://af4k.com/hc6u_crystals.htm

Posted by: dulmagedon@... dulmagedon
Date: Sun Oct 9, 2016 5:08 am ((PDT))

I
have been playing with BFOs added to older radios (late 1930s floor model with SW) James H gave me some good tips on how it was done in the S-38 and some National sets that did not have a BFO proper so I have spent the last few weeks playing with that idea in many forms. It is surprising how easy it is to do so the tip of putting the output of your osc nearby will for sure do it. Killing the AVC helps even more. And I am impressed on your build of it too. May it be the first of many osc to come from your bench.

donVe3LYX

Maybe we need a new TV show called "Solder Wars!"

27178. Experience with Kitchin's Simple Regen Radio for Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-10 17:20:48 UTC
From: rhulett1@...
Topic: 27178 Message: 27178

I built this radio and through kindness of Rob KB3BYT tested several different diodes in the radio.

THIS is the KITCHIN schematic
http://www.learnmorsecode.com/kitchin/aK62.jpg
http://www.learnmorsecode.com/kitchin/aK62.jpg

This is the whole project:
http://www.learnmorsecode.com/kitchin/index.html
http://www.learnmorsecode.com/kitchin/index.html

The germanium diodes tested were a RS "General Purpose Germanium", D9B, unknown germanium, 2AA113, D311. All worked in the circuit. The D311 is the best, the one I got from RS is the worst. D9B, Unknown, and 2AA113 are in the middle.

The shottsky diodes tested were 1N5817, 135106, CDSH270. NONE of the Schottsky diodes receive for me.

It's strange because recall reading folks saying a 1N5817 worked nearly as well as a 1N34A. Maybe there is something wrong with my implementation. The D311 is head and shoulders the best of the batch.

Would appreciate any advice or comments.

72, Curt KB5JO

27179. Re: Experience with Kitchin's Simple Regen Radio for Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-10 18:01:57 UTC
From: mikhail-vulkov@...
Topic: 27178 Message: 27179

Hi Curt!
My advice is to shunt detector diode with a resistor. This will form a normal clamping circuit independent from reverse leakage current of diode which varies with temperature. The resistance is between 100k and 10Meg for different diodes, but you can estimate it with a potentiometer.

27180. Re: [regenrx] Re: Experience with Kitchin's Simple Regen Radio for Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-10 18:32:38 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27178 Message: 27180

Dear amigos :

The Kitchin receiver is IMHO not exactly a regenerative detector receiver.

A circuit analysis shows a regenerative RF amplifier, coupled to a ¨floating detector diode¨...I have heard in the past that a modification is done to the detector so that the diode works into a real stable load impedance....

Wonder if any of the least members have heard about that mode. I remember seen NA5N's built solid state regenerative receiver been demostrated to me in Denver, Colorado , using a short length of wire and picking up many short wave broadcast stations with excellent quality.

73 and DX

Arnie Coro CO2KK

On 10/10/16 14:01, mikhail-vulkov@... [regenrx] wrote:
>
>
> Hi Curt!
> My advice is to shunt detector diode with a resistor. This will form a
> normal clamping circuit independent from reverse leakage current of
> diode which varies with temperature. The resistance is between 100k
> and 10Meg for different diodes, but you can estimate it with a
> potentiometer.
>
>

27181. 1928 QSL

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-10 18:59:23 UTC
From: Hubert Miller
Topic: 27181 Message: 27181

Found this QSL in my papers:

Radio__Nu60F from EG5HS 16 Blenheim Road, London NW8 ENGLAND
Your 20 metre sigs hrd here on ___April 1st ’28 at _abt 0200 G.M.T.
Strength__R5 Note__rough Conditions__F.B.
Transmitter__75 M.A. 2000 volts. Sync. R.A.C. to Mullard tube in Series
Feed Armstrong circuit. Q.S.O. All continents and all U.S.A. dcts.
__NA, NP, etc. Receiver. Low capacity detector tube + 1 audio.
Aerial. Full wave voltage fed Horizontal Hertz.
Hope this checks up o.k. I was Q.S.O. 73’s M.F.J. Samuel

End quote.
What’s this mean: Nu60F; Sync (i understand the R.A.C.); NA, NP ?

Signal i would think sounded like hell – a single tube power oscillator
with AC plate voltage.
Interesting how simple his receiver is; two tube regen – but we know
those can deliver remarkable sensitivity.
H. M.

27182. Re: [regenrx] Re: Experience with Kitchin's Simple Regen Radio for Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-10 19:03:19 UTC
From: Michael
Topic: 27178 Message: 27182

Mikhail, you confirm my understanding. The explanation of why the
floating diode works must be the reverse leakage current. A high-ohm
shunt resistor can indeed stabilise performance. It is definitely
a regen, but the regen is in the RF stage, not the detector.

Has anyone experimented with an improved AF stage?
The LM386 is so noisy, so yesterday...

¡Arnie, nos da mucho placer de saber que el mal viento no
ha impedido sus actividades!

Michael
UK

On 10.10.16 19:32, 'Prof. Arnaldo Coro Antich' coro@... [regenrx] wrote:

> Dear amigos :
>
> The Kitchin receiver is IMHO not exactly a regenerative detector receiver.
>
> A circuit analysis shows a regenerative RF amplifier, coupled to a
> ¨floating detector diode¨...I have heard in the past that a
> modification is done to the detector so that the diode works into a real
> stable load impedance....
>
> Wonder if any of the least members have heard about that mode. I
> remember seen NA5N's built solid state regenerative receiver been
> demostrated to me in Denver, Colorado , using a short length of wire
> and picking up many short wave broadcast stations with excellent quality.
>
> 73 and DX
>
> Arnie Coro CO2KK
>
>
> On 10/10/16 14:01, mikhail-vulkov@... [regenrx] wrote:
>> Hi Curt!
>> My advice is to shunt detector diode with a resistor. This will form a
>> normal clamping circuit independent from reverse leakage current of
>> diode which varies with temperature. The resistance is between 100k
>> and 10Meg for different diodes, but you can estimate it with a
>> potentiometer.

27183. Re: [regenrx] 1928 QSL

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-10 19:11:33 UTC
From: tbs50a@...
Topic: 27181 Message: 27183

Hey Hue,
Check the date, maybe a clue.

Terry N3GTE

-----Original Message-----
From: Hubert Miller kargo_cult@... [regenrx] <regenrx@yahoogroups.com>
To: AWA <antiquewirelessassociation@yahoogroups.com>; regenrx <regenrx@yahoogroups.com>
Sent: Mon, Oct 10, 2016 2:59 pm
Subject: [regenrx] 1928 QSL

Found this QSL in my papers:

Radio__Nu60F from EG5HS 16 Blenheim Road, London NW8 ENGLAND
Your 20 metre sigs hrd here on ___April 1st ’28 at _abt 0200 G.M.T.
Strength__R5 Note__rough Conditions__F.B.
Transmitter__75 M.A. 2000 volts. Sync. R.A.C. to Mullard tube in Series
Feed Armstrong circuit. Q.S.O. All continents and all U.S.A. dcts.
__NA, NP, etc. Receiver. Low capacity detector tube + 1 audio.
Aerial. Full wave voltage fed Horizontal Hertz.
Hope this checks up o.k. I was Q.S.O. 73’s M.F.J. Samuel

End quote.
What’s this mean: Nu60F; Sync (i understand the R.A.C.); NA, NP ?

Signal i would think sounded like hell – a single tube power oscillator
with AC plate voltage.
Interesting how simple his receiver is; two tube regen – but we know
those can deliver remarkable sensitivity.
H. M.

27184. Re: [regenrx] 1928 QSL

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-10 19:11:45 UTC
From: Michael
Topic: 27181 Message: 27184

My Dad was one of the youngest hams in those days.
He built such one-valve tx and regen combinations
- and later got roped into hush-hush WW2 activities.

I note nigh insignificant technical improvements since...

Michael
UK

On 10.10.16 19:59, Hubert Miller kargo_cult@... [regenrx] wrote:
>
> Found this QSL in my papers:
>
> Radio__Nu60F from EG5HS 16 Blenheim Road, London NW8 ENGLAND
> Your 20 metre sigs hrd here on ___April 1^st ’28 at _abt 0200 G.M.T.
> Strength__R5 Note__rough Conditions__F.B.
> Transmitter__75 M.A. 2000 volts. Sync. R.A.C. to Mullard tube in Series
> Feed Armstrong circuit.

27185. Re[2]: [regenrx] Re: Experience with Kitchin's Simple Regen Radio for Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-10 19:13:41 UTC
From: Hubert Miller
Topic: 27178 Message: 27185

While i was filing paper here yesterday i came across the instruction sheets for the "TAMAR A.M. Radio Medium Wave Band"
kit circa 2005. This radio kit has disappeared like a pebble in the ocean and googling returns no results. TAMAR seems to be
only in the business of electronic diesel engine controls now.

The circuit uses a BF244B FET as regen amp. Source is via 2.2kR to ground and drain is also 2.2kR. A 2.2 nF takes from the
drain to a OA91 diode to a junction of two caps; 15 nF to ground and 100 nF to the base of the BC549C audio. There are
two more audio transistors. I mention this circuit only because it's another working example of the 'floating diode' circuit.
I may eventually post the schematic.
One oddity is the tickler winding lower end connects to the top end (= FET gate) of the tuned circuit. I wondered if that
was a misdrawn schematic but when i looked at the coil winding sketch, sure enough, that's how they did it. I still am kind
of puzzled over that. The tickler is fed thru a 140 pF variable and in the conventional circuit, the lower end would go to
ground.
-H M

27186. Re[2]: [regenrx] Re: Experience with Kitchin's Simple Regen Radio for Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-10 19:18:05 UTC
From: Hubert Miller
Topic: 27178 Message: 27186

I am not totally convinced of the 'reverse leakage' theory.
The TAMAR kit has capacitors before and after the diode. These are non-lytic type caps and DC resistance
thru them is infinitesimal. Even with a Schottky with a resistor across it, in this circuit, there is NO DC
discharge path.
Has someone actually used the Schottky with parallel resistor, and found that worked equivalently to a,
say, OA91 ?
-H M

27187. Re: [regenrx] Re: Experience with Kitchin's Simple Regen Radio for Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-10 19:27:14 UTC
From: Rob
Topic: 27178 Message: 27187

Please share the schematic.

On 10/10/2016 03:13 PM, Hubert Miller kargo_cult@... [regenrx] wrote:
>
> While i was filing paper here yesterday i came across the instruction
> sheets for the "TAMAR A.M. Radio Medium Wave Band"
> kit circa 2005. This radio kit has disappeared like a pebble in the
> ocean and googling returns no results. TAMAR seems to be
> only in the business of electronic diesel engine controls now.
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> The circuit uses a BF244B FET as regen amp. Source is via 2.2kR to
> ground and drain is also 2.2kR. A 2.2 nF takes from the
> drain to a OA91 diode to a junction of two caps; 15 nF to ground and
> 100 nF to the base of the BC549C audio. There are
> two more audio transistors. I mention this circuit only because it's
> another working example of the 'floating diode' circuit.
> I may eventually post the schematic.
> One oddity is the tickler winding lower end connects to the top end (
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> was a misdrawn schematic but when i looked at the coil winding sketch,
> sure enough, that's how they did it. I still am kind
> of puzzled over that. The tickler is fed thru a 140 pF variable and in
> the conventional circuit, the lower end would go to
> ground.
> -H M
>

27188. Re: [regenrx] 1928 QSL

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-10 19:35:08 UTC
From: Phil
Topic: 27181 Message: 27188

Hmm, look at the date, it might give you some clue (only maybe).

"April 1^st ’28 at _abt 0200 G.M.T."

Another kicker, the term "73's" was a child of the '70s CB craze, an incorrect use of 73. . . To say 73's would be like saying "best regards's" .

"Hope this checks up o.k.I was Q.S.O.73’sM.F.J. Samuel

73 de Phil, KO6BB.
Specializing in DXing NDBs (Longwave Beacons).

Location: "The Beaconeer's Lair".
Merced, Central California, 37,18,37N 120,30,6W CM97rh
KO6BB/B beacon, ~20W to a Ringo Vertical 24/7 on 28.290 MHz.
http://www.qsl.net/ko6bb/

HF/LF RADIOS:
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
Icom: IC-7200 Xceiver, DSP IF & filters (~2015).
Kenwood: TS-450SAT Xceiver, cascaded 250/125Hz Inrad filters.
SDR: Softrock Ensemble II LF (built from a kit 2015).

ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 4 Port Antenna Multicoupler, Feeds 4 RX's.
AF Filters: Timewave DSP-599zx & HOMEBREW 8 Hz Filter.

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.
Cushcraft AR-10 Ringo at 14 feet AGL for 10M beacon.

On 10/10/2016 6:59 PM, Hubert Miller kargo_cult@... [regenrx] wrote:
>
> Found this QSL in my papers:
>
> Radio__Nu60F fromEG5HS 16 Blenheim Road, London NW8 ENGLAND
>
> Your 20 metre sigs hrd here on ___April 1^st ’28 at _abt 0200 G.M.T.
>
> Strength__R5Note__roughConditions__F.B.
>
> Transmitter__75 M.A.2000 volts. Sync. R.A.C. to Mullard tube in Series
>
> Feed Armstrong circuit. Q.S.O. All continents and all U.S.A.dcts.

>
> __NA, NP, etc.Receiver. Low capacity detector tube + 1 audio.
>
> Aerial. Full wave voltage fed Horizontal Hertz.
>
> Hope this checks up o.k.I was Q.S.O.73’sM.F.J. Samuel
>
> End quote.
>
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>
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>
> with AC plate voltage.
>
> Interesting how simple his receiver is; two tube regen – but we know
>
> those can deliver remarkable sensitivity.
>
> H. M.
>

27189. Re: [regenrx] Re: Experience with Kitchin's Simple Regen Radio for Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-10 19:35:42 UTC
From: mikhail-vulkov@...
Topic: 27178 Message: 27189

Hi Arnie!
The all six regen circuits in 1913 patent of Armstrong contain also as demodulator „floating clampers“ - there is no grid leak resistor. This is stupid - SPICE will refuse to simulate it.
http://www.pavekmuseum.org/Armstrong/1113149.html
http://www.pavekmuseum.org/Armstrong/1113149.html
The design of an electronic signal processing network should start with a block diagram. Despite the ocean of information about regen circuits in the Web, I can’t find block diagram of regenerative network. The regen network should be reinvented.

27190. Re: Experience with Kitchin's Simple Regen Radio for Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-10 20:05:55 UTC
From: rhulett1@...
Topic: 27178 Message: 27190

The first paragraph of Circuit Description (and the schematic itself) confirms it is a regenerative RF amplifier, the "floating diode" being the detector. Building this radio was mainly my exercise to participate in project for another group. I'm not all that happy with the radio's performance, it is too sensitive to stray capacitance. Thankfully didn't invest a lot of time and money in building it, guess I got my money's worth lol.

FWIW, the best Regen I own is the Bayou Jumper built using a PCB from N5IB, evidently based on an N1TEV design. It is solid as a rock and I have easily made QSOs on 40M with it paired with a "2Fer" 2W transmitter. Even had a 2xSpy QSO with N5IB. Of course it is much more complex than the "Simple Regen".

72, Curt KB5JO

27191. RE: [regenrx] 1928 QSL

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-10 20:06:28 UTC
From: Hubert Miller
Topic: 27181 Message: 27191

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Monday, October 10, 2016 12:35 PM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] 1928 QSL

No – there’s no joke about the QSL, despite the date.
I omitted one line,
“4 ‘Sevens’ that day. Hope cuagn next spring”.
I believe he is reporting reception only, while working someone else.
Because of scarcity of tube rectifiers and nonexistence of electrolytic filter capacitors for high voltage,
most (?) ham transmitters of the time, if not powered by a motor-generator DC supply, used “raw A.C.”
on the transmitter. But the “sync” i do not understand, among a couple other points.
-Hue

Hmm, look at the date, it might give you some clue (only maybe).

"April 1^st ’28 at _abt 0200 G.M.T."

Another kicker, the term "73's" was a child of the '70s CB craze, an
incorrect use of 73. . . To say 73's would be like saying "best
regards's" .

"Hope this checks up o.k.I was Q.S.O.73’sM.F.J. Samuel

73 de Phil, KO6BB.
Specializing in DXing NDBs (Longwave Beacons).

27192. Re: [regenrx] Re: Experience with Kitchin's Simple Regen Radio for Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-10 20:08:33 UTC
From: Michael
Topic: 27178 Message: 27192

On 10.10.16 20:27, Rob roomberg@... [regenrx] wrote:

> Please share the schematic.

Link here, as earlier linked by Curt KB5JO,
and readily found by searching.

THIS is the KITCHIN schematic
http://www.learnmorsecode.com/kitchin/aK62.jpg

This is the whole project:
http://www.learnmorsecode.com/kitchin/index.html

This Kitchin design is innovative and worthy
of emulation and experimentation. It has been
widely discussed, not least because of the
"floating diode" innovation, an anomaly of
semiconductor physics, in this implementation
best explained by leakage current.

Discuss!

Michael

27193. RE: [regenrx] Re: Experience with Kitchin's Simple Regen Radio for Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-10 20:13:04 UTC
From: Hubert Miller
Topic: 27178 Message: 27193

The ‘Bayou Jumper’ may be in the group files, but i usually find it easier to just look on the overall net, so i googled
and found it on a French site,
http://n5ib.net/Sauteur%20de%20Bayou%20Overview.pdf

I see it dispenses with the diode detector and has the FET as regen detector.
The hand capacity with your Kitchin circuit is due to the particular construction, isn’t it?
-H

27194. Re: [regenrx] Re: Experience with Kitchin's Simple Regen Radio for Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-10 20:14:35 UTC
From: Michael
Topic: 27178 Message: 27194

On 10.10.16 20:27, Rob roomberg@... [regenrx] wrote:

> Please share the schematic.

As earlier linked by Curt KB5JO

THIS is the KITCHIN schematic
http://www.learnmorsecode.com/kitchin/aK62.jpg

This is the whole project:
http://www.learnmorsecode.com/kitchin/index.html

The Kitchin design appears to be an anomaly
of semiconductor physics. However, the
leakage current explanation is the best thus
far proposed. It is well worth replication
and experimentation.

Michael

27195. RE: [regenrx] Re: Experience with Kitchin's Simple Regen Radio for Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-10 20:18:22 UTC
From: Hubert Miller
Topic: 27178 Message: 27195

Michael, i also was going to post that the ‘floating diode’ was a particularity of semiconductor diodes
BUT i suddenly recalled i had seen the same circuit, using a vacuum tube diode, in some schematic
of a gen-coverage SW radio – all i can recall is it wasn’t a major name company – and wasn’t a top
end type receiver – but i can’t recall for the life of me which receiver, although i’ll no doubt come
across it again, as i’m sure it’s somewhere in my collection of dozens of receiver manuals.
Darn, this is bugging me now. I wonder if i can dig thru my manuals without the nagging feeling i
should be doing something more important right now....
-H

27196. RE: [regenrx] Re: Experience with Kitchin's Simple Regen Radio for Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-10 20:21:12 UTC
From: Hubert Miller
Topic: 27178 Message: 27196

The ‘diode leakage’ theory has to demonstrate a DC leakage path. With a low value capacitor in series, can you show
me a DC path? I have tried the circuit with a capacitor in the 100s of pF – there is NO dc leakage thru such a cap.
-Hue

27197. Re: Experience with Kitchin's Simple Regen Radio for Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-10 21:40:17 UTC
From: b_weeber@...
Topic: 27178 Message: 27197

** The all six regen circuits in 1913 patent of Armstrong contain also as demodulator „floating clampers“
** there is no grid leak resistor

That old tubes haven't been evacuated properly. So instead of a resistor the rest of atmosphere inside the tube caused the leak. For a short time periode they have sold extra detector tubes and amplifier tubes, where the latter ones had a better vacuum.

I tried resistors above schottky diodes in every direction and above the capacitor. Nothing worked as well as a germanium diode. The worst germanium diode worked better than the best schottky. IMO it has something to do with either the recovery time or another unknown behaviour. Any resistor combined with the diode would reduce the Q of the tank circuit.

To avoid this circuit, an infinite impedance detector like this would be a good replacement:
http://www.angelfire.com/planet/funwithtransistors/Radio-Inf_Z_Detector.html
http://www.angelfire.com/planet/funwithtransistors/Radio-Inf_Z_Detector.html

Best regards,
Bernd

27198. Re: [regenrx] Re: Experience with Kitchin's Simple Regen Radio for Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-10 20:31:16 UTC
From: Michael
Topic: 27178 Message: 27198

This is a tried and tested regen, with various incarnations,
such as TenTec 1253, MRJ8100, Vetronics VEC-102K - q.v.

It will work even before you attach the antenna. Boring :-)

Michael

On 10.10.16 21:13, Hubert Miller kargo_cult@... [regenrx] wrote:
>
> The ‘Bayou Jumper’ may be in the group files, but i usually find it
> easier to just look on the overall net, so i googled
>
> and found it on a French site,
>
> http://n5ib.net/Sauteur%20de%20Bayou%20Overview.pdf

27199. Re: [regenrx] 1928 QSL

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-10 22:16:02 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27181 Message: 27199

More about easy to ¨get going¨ regenerative radios !

Published by Technical Topics column of Radio Communications British Magazine... the circuit that has proven to me easier to ¨get going¨ seems to have originated in Holland, and it had a funny name like ¨ Rotor¨ or something like that.

Essentially it uses a cascode regenerative detector with the classic ECC81/12AT7/Russian 6N? 1 , 2 or 3... The circuit is completed with another identical tube for the audio... BUT, it you want real loudspeaker volume... add a ECL82 / 6BM8 and you will enjoy nice audio by adding some feedback from the audio output transformer...

One additional benefit of the circuit is that it was published with precise data to wind coils for easy tuning bandspread on the amateur bands.

My good amigo Bernardo CO3BN built one and was amazed by the performance he was able to achieve, even when just using the second half of the audio tube coupled to the output transformer.

Bernardo is helping newcomers to amateur radio that have obtained the beginners license and are presently only on 2 meters, to listen for the first time on 40 meters, where one can pick up many Cuban stations during the daytime hours, and a lot of DX at night. The RF attenuator is just a potentiometer... and the bandspread is excellent for tuning for CW and SSB stations.

73 and DX

Arnie Coro

CO2KK

BTW... I insist ... so far not one of the many solid state regenerative receivers has matched even rather simple sets built with tubes !!!

27200. Re: Experience with Kitchin's Simple Regen Radio for Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-10 22:27:38 UTC
From: rhulett1@...
Topic: 27178 Message: 27200

Maybe. Though at least one other builder commented on the same feature. 72, Curt KB5JO

27201. RE: [AWA] 1928 QSL

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-10 22:26:02 UTC
From: David Evans
Topic: 27181 Message: 27201

That would be G5HS Samuel and probably U6OF at the other end.
73 David CT4RL

Sent from Mail<https://go.microsoft.com/fwlink/?LinkId=550986> for Windows 10

From: Hubert Miller kargo_cult@...
[antiquewirelessassociation]<mailto:antiquewirelessassociation@yahoogroups.com>
Sent: 10 October 2016 19:59
To: AWA<mailto:antiquewirelessassociation@yahoogroups.com>;
regenrx@yahoogroups.com<mailto:regenrx@yahoogroups.com>
Subject: [AWA] 1928 QSL

Found this QSL in my papers:

Radio__Nu60F from EG5HS 16 Blenheim Road, London NW8 ENGLAND
Your 20 metre sigs hrd here on ___April 1st '28 at _abt 0200 G.M.T.
Strength__R5 Note__rough Conditions__F.B.
Transmitter__75 M.A. 2000 volts. Sync. R.A.C. to Mullard tube in Series
Feed Armstrong circuit. Q.S.O. All continents and all U.S.A. dcts.
__NA, NP, etc. Receiver. Low capacity detector tube + 1 audio.
Aerial. Full wave voltage fed Horizontal Hertz.
Hope this checks up o.k. I was Q.S.O. 73's M.F.J. Samuel

End quote.
What's this mean: Nu60F; Sync (i understand the R.A.C.); NA, NP ?

Signal i would think sounded like hell - a single tube power oscillator
with AC plate voltage.
Interesting how simple his receiver is; two tube regen - but we know
those can deliver remarkable sensitivity.
H. M.

27202. Re: [regenrx] Re: Experience with Kitchin's Simple Regen Radio for Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-10 23:00:41 UTC
From: Rob
Topic: 27178 Message: 27202

Bayou jumper schematic :

http://www.learnmorsecode.com/kitchin/sauteur2.jpg

On 10/10/2016 04:13 PM, Hubert Miller kargo_cult@... [regenrx] wrote:
>
> The ‘Bayou Jumper’ may be in the group files, but i usually find it
> easier to just look on the overall net, so i googled
>
> and found it on a French site,
>
> http://n5ib.net/Sauteur%20de%20Bayou%20Overview.pdf
>
> I see it dispenses with the diode detector and has the FET as regen
> detector.
>
> The hand capacity with your Kitchin circuit is due to the particular
> construction, isn’t it?
>
> -H
>
>

27203. Re: Experience with Kitchin's Simple Regen Radio for Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-10 23:54:37 UTC
From: rhulett1@...
Topic: 27178 Message: 27203

Surfing around, encountered person who had built the radio I built. And his observations were the same as mine. He ented up scrapping the concept and building this circuit, which looks a lot like the Bayou Jumper to mme.

27204. Re: [regenrx] Re: Experience with Kitchin's Simple Regen Radio for Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-10 22:34:41 UTC
From: Jim Wiley
Topic: 27178 Message: 27204

Another thing I have tried (successfully) is a very small amount of forward bias with a 1N5711 or similar Schottky diode, something like 1 megohm in series with a 1.5 volt battery, to "help" overcome the diode barrier. Solves essentially all the problems caused by the unobtainium factor involving 1N34 and similar diodes. The battery will last essentially forever (or at least shelf life) since the draw is down in the one or two micro-ampere range. Just look for a suitable place to insert the battery and series resistor, and if you have the tools, adjust the size of the resistor until a just barely measurable forward current flows.

Try connecting the battery and bias resistor in series with the "cold" end of the tuned circuit, and also bypassing the cold end of the tuning circuit to ground with a .01 uFd disk ceramic cap. The purpose of this last is to bypass RF around the bias circuit. Obviously there needs to be a completed circuit of some sort involved - a totally open path will not perform properly. Ideally, you will be able to fiddle with things until you reach the optimum sensitivity point, theoretically even better than a "red hot" germanium point contact detector. Select the value of the series resistor for best results. As in pretty much all cases where this sort of magical mumbo-jumbo is involved, experimentation is everything.

- Jim, KL7CC

On 10/10/2016 1:40 PM, b_weeber@... [regenrx] wrote:
>
> ** The all six regen circuits in 1913 patent of Armstrong contain also
> as demodulator „floating clampers“
> ** there is no grid leak resistor
>
> That old tubes haven't been evacuated properly. So instead of a
> resistor the rest of atmosphere inside the tube caused the leak. For a
> short time periode they have sold extra detector tubes and amplifier
> tubes, where the latter ones had a better vacuum.
>
> I tried resistors above schottky diodes in every direction and above
> the capacitor. Nothing worked as well as a germanium diode. The worst
> germanium diode worked better than the best schottky. IMO it has
> something to do with either the recovery time or another unknown
> behaviour. Any resistor combined with the diode would reduce the Q of
> the tank circuit.
>
> To avoid this circuit, an infinite impedance detector like this would

> be a good replacement:
> http://www.angelfire.com/planet/funwithtransistors/Radio-Inf_Z_Detector.html
>
> Best regards,
> Bernd
>
>

27205. Re: [regenrx] Re: Experience with Kitchin's Simple Regen Radio for Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-11 01:34:42 UTC
From: Rob
Topic: 27178 Message: 27205

What is the source of this image?

On 10/10/2016 07:54 PM, rhulett1@... [regenrx] wrote:
>
> Surfing around, encountered person who had built the radio I built.
> And his observations were the same as mine. He ented up scrapping the
> concept and building this circuit, which looks a lot like the Bayou
> Jumper to mme.
>
>

27206. RE: [regenrx] Re: Experience with Kitchin's Simple Regen Radio for Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-11 01:44:37 UTC
From: Hubert Miller
Topic: 27178 Message: 27206

Interesting that this one performs better than the original Kitchin circuit. I don’t at the moment understand the why of this.
I noticed this circuit has a reverse-bias clamp diode across the gate circuit. I presume this will only come into effect in oscillating state,
and i wonder if there’s any benefit. I think the diode here in an oscillator circuit by disallowing positive-bias gate current, only decreases
the harmonic content in the generated RF.
-H M

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Monday, October 10, 2016 4:55 PM
To: regenrx@yahoogroups.com
Subject: [regenrx] Re: Experience with Kitchin's Simple Regen Radio for Beginners

Surfing around, encountered person who had built the radio I built. And his observations were the same as mine. He ented up scrapping the concept and building this circuit, which looks a lot like the Bayou Jumper to mme.

[http://www.geojohn.org/Radios/MyRadios/RegenSW/FET_RegenS.jpg]

27207. Re: [regenrx] Re: Experience with Kitchin's Simple Regen Radio for Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-11 02:07:27 UTC
From: Jim Pruitt
Topic: 27178 Message: 27207

This will get you there:
http://n5ib.net/Sauteur%20de%20Bayou%20Overview.pdf

or go from his main page at:
http://n5ib.net/Index.xht

and the Bayou is listed as "40 Meter Regen Rx "

On Mon, Oct 10, 2016 at 6:34 PM, Rob roomberg@... [regenrx] <
regenrx@yahoogroups.com> wrote:

>
>
> What is the source of this image?
>
> On 10/10/2016 07:54 PM, rhulett1@consolidated.net [regenrx] wrote:
>
>
>
> Surfing around, encountered person who had built the radio I built. And
> his observations were the same as mine. He ented up scrapping the concept
> and building this circuit, which looks a lot like the Bayou Jumper to mme.
>
>
>
>

27208. Re: [regenrx] Re: Experience with Kitchin's Simple Regen Radio for Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-10 20:26:39 UTC
From: Michael
Topic: 27178 Message: 27208

Methinks a high-ohm paralled resistor would perform more happily...

Michael

On 10.10.16 21:21, Hubert Miller kargo_cult@... [regenrx] wrote:

> The ‘diode leakage’ theory has to demonstrate a DC leakage path. With a
> low value capacitor in series, can you show
>
> me a DC path? I have tried the circuit with a capacitor in the 100s of
> pF – there is NO dc leakage thru such a cap.
>
> -Hue

27209. RE: [regenrx] Re: Experience with Kitchin's Simple Regen Radio for Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-11 03:45:35 UTC
From: david.newkirk@...
Topic: 27178 Message: 27209

Hue wrote:

> The ‘diode leakage’ theory has to demonstrate a DC leakage path. With a low value capacitor in series, can you show me a DC path? I have tried the circuit with a capacitor in the 100s of pF – there is NO dc leakage thru such a cap.

It's possible for the diode + capacitor in that circuit to conduct on peaks, acting as an integrator to keep the capacitor charged as its charge leaks away. A leakage path to discharge the diode would be through the diode's back resistance--a high resistance to be sure, but a finite resistance nonetheless--and ultimately its driving circuitry and the internals of the LM386.

Two more floating-diode circuits: By Goodman's cathode-to-cathode two-diode product detector of the 1960s (was claimed to have) used the back resistance of one of its diodes as a dc return. Lew McCoy's Mighty Midget receiver (April 1966 QST) originally used a voltage-doubling detector that allowed one of its diodes to float exactly in the manner of the Kitchin Receiver; a later Feedback or Technical Correspondence item--not indexed so far as I can tell, and I'm unwilling to go issue by issue to find it--corrected the gaffe and refactored the iffy two-diode detector into a half-wave (single-diode) circuit that included a well-characterized load resistance. The distillation of the Mighty Midget coverage for a later ARRL Handbook or three (1969, at least) includes the half-wave detector.

Although I'm glad that those who have built the Kitchin circuit and found the results gratifying have had, and maybe are still having, fun, had I been on the QST technical staff when that article was submitted for editorial review I would have recommended that it not be published on the grounds that the function and operation of the floating diode (a) was not sufficiently explained by the author and (b) would therefore cause needless technical controversy to the net effect of calling into some question the savvy of QST's technical staff.

That over a decade later hand-wringing continues about the the function of the diode proves my points.
Readily reproducible regenerative detector circuits abound that work explainably well without such hand-waving. I recommend such circuits over the less well-defined and -understood.

Best regards,

Dave
amateur radio W9BRD
ARRL HQ 1974-1977 and 1985-1996

27210. moc3020 triac driver.....triac has a lot less sensitivity at low temperatures

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-11 04:47:44 UTC
From: Rob
Topic: 27163 Message: 27210

Please define low temperatures.
My current interest in triac control is to be used in table top PCB
toner transfer projects
using a laminator or a hot plate.
Pretty much indoor living space..kitchen temperature... 65 F to 75 F
degrees.

Dreaming up other triac circuits.... basement flood pump... attic
exhaust fan....
there really is no temperature below 38 degrees....
but
I saw an outdoor walkway lighting triac circuit that COULD be exposed to
winter
freezing temperatures..... so then I thought a 5 watt ceramic wire wound
resistor
could be used to keep the circuit humming.
http://www.learnmorsecode.com/help/triac/nightlight3.jpg

On 10/09/2016 10:41 AM, 'Larry' lbeaty@... [regenrx] wrote:
>
> Rob, Just remember the triac has a lot less sensitivity at low
> temperatures. Should you ever have to work at low temperatures.
>
> Larry
>
> *From:*regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
> *Sent:* Saturday, October 08, 2016 9:54 PM
> *To:* regenrx@yahoogroups.com
> *Subject:* [regenrx] moc3020 triac driver
>
> The goal is control 8 amp hot plate or laminator heaters.
> based on just one of the two heating elements in this circuit
> http://www.learnmorsecode.com/help/triac/triaccontrol.jpg
>
> this circuit runs a 100 watt light bulb without burning anything on
> the board.
> yippeeeeee
> http://www.learnmorsecode.com/laminator/pic/triacperf.jpg
> good triac test.
> First triac I ever used.
>
>
>

27211. Kitchin.....I would have recommended that it not be published

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-11 04:59:10 UTC
From: Rob
Topic: 27178 Message: 27211

Wow Dave.....
you have some really serious experience.

Can you recommend a particular "simple regen radio for beginners" that is explainable...not a hand wringing.... that we can build with scouts?

On 10/10/2016 11:45 PM, david.newkirk@... [regenrx] wrote:
> Hue wrote:
>
> > The ‘diode leakage’ theory has to demonstrate a DC leakage path.
> With a low value capacitor in series, can you show me a DC path? I
> have tried the circuit with a capacitor in the 100s of pF – there is
> NO dc leakage thru such a cap.
>
> It's possible for the diode + capacitor in that circuit to conduct on
> peaks, acting as an integrator to keep the capacitor charged as its
> charge leaks away. A leakage path to discharge the diode would be
> through the diode's back resistance--a high resistance to be sure, but
> a finite resistance nonetheless--and ultimately its driving circuitry
> and the internals of the LM386.
>
> Two more floating-diode circuits: By Goodman's cathode-to-cathode
> two-diode product detector of the 1960s (was claimed to have) used the
> back resistance of one of its diodes as a dc return. Lew McCoy's
> Mighty Midget receiver (April 1966 QST) originally used a
> voltage-doubling detector that allowed one of its diodes to float
> exactly in the manner of the Kitchin Receiver; a later Feedback or
> Technical Correspondence item--not indexed so far as I can tell, and
> I'm unwilling to go issue by issue to find it--corrected the gaffe and
> refactored the iffy two-diode detector into a half-wave (single-diode)
> circuit that included a well-characterized load resistance. The
> distillation of the Mighty Midget coverage for a later ARRL Handbook
> or three (1969, at least) includes the half-wave detector.
>
> Although I'm glad that those who have built the Kitchin circuit and
> found the results gratifying have had, and maybe are still having,
> fun, had I been on the QST technical staff when that article was
> submitted for editorial review I would have recommended that it not be
> published on the grounds that the function and operation of the
> floating diode (a) was not sufficiently explained by the author and
> (b) would therefore cause needless technical controversy to the net
> effect of calling into some question the savvy of QST's technical staff.
>
> That over a decade later hand-wringing continues about the the
> function of the diode proves my points.

> Readily reproducible regenerative detector circuits abound that work
> explainably well without such hand-waving. I recommend such circuits
> over the less well-defined and -understood.
>
> Best regards,
>
> Dave
> amateur radio W9BRD
> ARRL HQ 1974-1977 and 1985-1996
>
> --
>

27212. RE: [regenrx] Re: Experience with Kitchin's Simple Regen Radio for Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-11 06:10:39 UTC
From: Hubert Miller
Topic: 27178 Message: 27212

I asked how you (indefinite pronoun) using the diode leakage theory, explain the working of the “TAMAR regenerative radio kit”, which used capacitors
both before and after the diode. (I personally think the circuit does not require two caps in this circuit, and one could be removed with no loss of function.)
If i find the schematic i mentioned, a vacuum tube ‘floating diode’ in a commercially sold receiver, will that put to rest the semiconductor diode theory?
That might be enough reward for me to go looking for it.

I’m thinking i see it this way: The DC level the diode output circuit depends on the load capacitance and resistance. If this combination of load values is such
that the driven stage input capacitance drains below peak before the next train of modulated RF pulses, the diode will never be back-biased by the load
capacitor to nonconduct. Or you could maybe say the R and C values never allowed the modulated pulses to be integrated. Diode current always flows
during the ‘conduct cycle’. You depend on the load R to drain the load C. C discharge path does not require a backward path thru the diode. (For good
reason this circuit is NOT used in rectifier circuits to deliver serious power.) If i’m right, relatively low load capacitance (to ground) and low load resistance
(to ground) => favors the floating diode circuit.
I have in this circuit used a large range of capacitors, all non-lytic types in the pF and nF range, and all worked with
hardly any detectable difference. It does not faze me in the least or dissuade me that it’s not well understood as long as it’s reproducible, which means it’s
not just a fluke from using some problem circuit components.
I could be all wrong.....
This discussion has me itching to get out the breadboard again.
-H M

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Monday, October 10, 2016 8:46 PM
To: regenrx@yahoogroups.com
Subject: RE: [regenrx] Re: Experience with Kitchin's Simple Regen Radio for Beginners

Hue wrote:

> The ‘diode leakage’ theory has to demonstrate a DC leakage path. With a low value capacitor in series, can you show me a DC path? I have tried the circuit with a capacitor in the 100s of pF – there is NO dc leakage thru such a cap.

It's possible for the diode + capacitor in that circuit to conduct on peaks, acting as an integrator to keep the capacitor charged as its charge leaks away. A leakage path to discharge the diode would be through the diode's back resistance--a high resistance to be sure, but a finite resistance nonetheless--and ultimately its driving circuitry and the internals of the LM386.

Two more floating-diode circuits: By Goodman's cathode-to-cathode two-diode product detector of the 1960s (was claimed to have) used the back resistance of one of its diodes as a dc return. Lew McCoy's Mighty Midget receiver (April 1966 QST) originally used a voltage-doubling detector that allowed one of its diodes to float exactly in the manner of the Kitchin Receiver; a later Feedback or Technical Correspondence item--not indexed so far as I can tell, and I'm unwilling to go issue by issue to find it--corrected the gaffe and refactored the iffy two-diode detector into a half-wave (single-diode) circuit that included a well-characterized load resistance. The distillation of the Mighty Midget coverage for a later ARRL Handbook or three (1969, at least) includes the half-wave detector.

Although I'm glad that those who have built the Kitchin circuit and found the results gratifying have had, and maybe are still having, fun, had I been on the QST technical staff when that article was submitted for editorial review I would have recommended that it not be published on the grounds that the function and operation of the floating diode (a) was not sufficiently explained by the author and (b) would therefore cause needless technical controversy to the net effect of calling into some question the savvy of QST's technical staff.

That over a decade later hand-wringing continues about the the function of the diode proves my points.
Readily reproducible regenerative detector circuits abound that work explainably well without such hand-waving. I recommend such circuits over the less well-defined and -understood.

Best regards,

Dave
amateur radio W9BRD
ARRL HQ 1974-1977 and 1985-1996

27213. RE: [regenrx] Re: Experience with Kitchin's Simple Regen Radio for Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-11 06:57:39 UTC
From: qrp.gaijin@...
Topic: 27178 Message: 27213

In regenrx@yahoogroups.com, <kargo_cult@...> wrote :

> It does not faze me in the least or dissuade me that it’s not
> well understood as long as it’s reproducible, which means it’s
> not just a fluke from using some problem circuit components. > This discussion has me itching to get out the breadboard again.

See, that's the thing that always bugged me about the floating diode circuit -- for me, it was not reproducible, by which I mean that I used the floating diode in a number of different BJT regen circuits, and sometimes it worked, sometimes it didn't. When it didn't work, I got either poor sensitivity or hysteresis in the regeneration control, making it impossible to set the regen right on the edge of oscillation; inclusion of the diode would cause the circuit to slowly creep up closer and closer to oscillation (over a few seconds) until it snapped over and required the regen control to be reduced significantly to bring it back down below threshold.

So if you're going to experiment, I think it would be useful to see in which specific circuits it works well, and in which specific circuits it does not work well. I wrote up my very preliminary findings on this subject here:
http://theradioboard.com/rb/viewtopic.php?t=5790
http://theradioboard.com/rb/viewtopic.php?t=5790.

Personally, I've given up on the floating diode because I like to experiment with unusual BJT oscillator configurations and I cannot predict in advance if the floating diode will work well or not. I just take the AF off of the emitter and add some more AF amplification.

Best regards,
qrp.gaijin@yahoo.com
http://qrp-gaijin.blogspot.com http://qrp-gaijin.blogspot.com

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I asked how you (indefinite pronoun) using the diode leakage theory, explain the working of the “TAMAR regenerative radio kit”, which used capacitors
both before and after the diode. (I personally think the circuit does not require two caps in this circuit, and one could be removed with no loss of function.)
If i find the schematic i mentioned, a vacuum tube ‘floating diode’ in a commercially sold receiver, will that put to rest the semiconductor diode theory?
That might be enough reward for me to go looking for it.

I’m thinking i see it this way: The DC level the diode output circuit depends on the load capacitance and resistance. If this combination of load values is such
that the driven stage input capacitance drains below peak before the next train of modulated RF pulses, the diode will never be back-biased by the load
capacitor to nonconduct. Or you could maybe say the R and C values never allowed the

modulated pulses to be integrated. Diode current always flows
during the ‘conduct cycle’. You depend on the load R to drain the load C. C discharge path does not require a backward path thru the diode. (For good
reason this circuit is NOT used in rectifier circuits to deliver serious power.) If i’m right, relatively low load capacitance (to ground) and low load resistance
(to ground) => favors the floating diode circuit.
I have in this circuit used a large range of capacitors, all non-lytic types in the pF and nF range, and all worked with
hardly any detectable difference. It does not faze me in the least or dissuade me that it’s not well understood as long as it’s reproducible, which means it’s
not just a fluke from using some problem circuit components.
I could be all wrong.....
This discussion has me itching to get out the breadboard again.
-H M

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Monday, October 10, 2016 8:46 PM
To: regenrx@yahoogroups.com
Subject: RE: [regenrx] Re: Experience with Kitchin's Simple Regen Radio for Beginners

Hue wrote:

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It's possible for the diode + capacitor in that circuit to conduct on peaks, acting as an integrator to keep the capacitor charged as its charge leaks away. A leakage path to discharge the diode would be through the diode's back resistance--a high resistance to be sure, but a finite resistance nonetheless--and ultimately its driving circuitry and the internals of the LM386.

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Best regards,

Dave

amateur radio W9BRD

ARRL HQ 1974-1977 and 1985-1996

27214. RE: [regenrx] Re: Experience with Kitchin's Simple Regen Radio for Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-11 07:08:46 UTC
From: Hubert Miller
Topic: 27178 Message: 27214

No. I looked at it somewhat simplistically. There are effectively 2 capacitors in series with the diode. The actual series (“float”)
capacitor and the load-to-ground capacitance.

1. On charge cycle, these divide the peak DC value between them, according to their relative values.

2. As long as the driven stage input capacitance is allowed, by its parallel resistance, to discharge (drain down) into the load resistance, this one
capacitor will discharge, on the non-conduct, resting cycle, down from its peak.

3. So – on next conduct cycle the sum “back bias” of the TWO capacitors is now less than the instant peak input voltage.

4. Diode current will again flow, charging them again.

You can see that the circuit depends for good effectiveness on the load capacitance being not a great deal larger than the float
capacitor, and the load resistance i would think needs to be in the “sweet ballpark”, high enough to allow the input capacitance to
charge to as high as possible compared to the float capacitor, but low enough to be able to drain this cap on the non-conduct cycle.
I wonder if people have had not good results with this circuit, and if so, maybe because it looks (to me) like the values of these 3
components have to be all fitted into a smaller ballpark. (I mean there’s less tolerance, so you can’t assume it automagically will work?)
So yes, maybe it is less ‘reproducible’ as others suggest. And so, less desirable. It only – i think – offers a cheap & dirty way to couple the
RF stage to the detector to the audio without transformer coupling.
As for the hysteresis issue, just mentioned, i’m stumped. I’ll have to puzzle over that.

This is just my little more careful look at what i previously posted. This analysis still does NOT depend on any DC discharge path
thru the diode.
-Hue

27215. RE: [regenrx] Re: Experience with Kitchin's Simple Regen Radio for Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-11 07:17:08 UTC
From: Hubert Miller
Topic: 27178 Message: 27215

Your mention of taking the audio off the emitter brought to mind a couple of instances i'd seen.
R. A. Penfold in the second of his small Babani (publisher, U.K.) books on simple regen circuits,
touted this approach (using a JFET) for its better large-signal handling capability than the drain-
output circuits.
The second circuit i remembered (some of you have seen this too) is in a 1954 'Radio News'
project article that showed a submini tube driving a single transistor. The audio was extracted from the regen detector by a resistor in the cathode leg, so as to be able to drive
the input impedance of the transistor. The tube B+ was something like 7.5 volts. The transistor
may have even been direct coupled to this output resistor; i don't recall, but i have seen a
couple of 1950s radio-control superregen circuits where the tube plate current went right into the transistor base-emitter junction. (I can see that might cause complications, but part
of why it could work was maybe that those transistors were much lower – beta (current gain)
than now.
-Hue

27216. RE: [regenrx] Re: Experience with Kitchin's Simple Regen Radio for Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-11 07:44:59 UTC
From: qrp.gaijin@...
Topic: 27178 Message: 27216

In regenrx@yahoogroups.com, <kargo_cult@...> wrote :
> I wonder if people have had not good results with this circuit,
> and if so, maybe because it looks (to me) like the values of these 3
> components have to be all fitted into a smaller ballpark.

One thing I should mention that I did not consider was the quality of the capacitor used after the floating diode. In my experiments I just used some junkbox 10 nF capacitor. However, it's perhaps conceivable that this capacitor should be a low-loss, RF-grade capacitor.

Best regards,
qrp.gaijin@yahoo.com
http://qrp-gaijin.blogspot.com http://qrp-gaijin.blogspot.com

---In regenrx@yahoogroups.com, <kargo_cult@...> wrote :

No. I looked at it somewhat simplistically. There are effectively 2 capacitors in series with the diode. The actual series (“float”)
capacitor and the load-to-ground capacitance.
1. On charge cycle, these divide the peak DC value between them, according to their relative values.
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capacitor will discharge, on the non-conduct, resting cycle, down from its peak.
3. So – on next conduct cycle the sum “back bias” of the TWO capacitors is now less than the instant peak input voltage.
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You can see that the circuit depends for good effectiveness on the load capacitance being not a great deal larger than the float
capacitor, and the load resistance i would think needs to be in the “sweet ballpark”, high enough to allow the input capacitance to
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I wonder if people have had not good results with this circuit, and if so, maybe because it looks (to me) like the values of these 3
components have to be all fitted into a smaller ballpark. (I mean there’s less tolerance, so you can’t assume it automagically will work?)
So yes, maybe it is less ‘reproducible’ as others suggest. And so, less desirable. It only – i think – offers a cheap & dirty way to couple the
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As for the hysteresis issue, just mentioned, i’m stumped. I’ll have to puzzle over that.

This is just my little more careful look at what i previously posted. This analysis still does NOT depend on any DC discharge path

thru the diode.
-Hue

27217. Re: [regenrx] Kitchin....

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-11 09:00:01 UTC
From: Michael
Topic: 27178 Message: 27217

The title of Charles Kitchin's article was "A Simple Regen Radio for Beginners", "Need a simple, fun project - possibly for a Scout Radio Merit Badge?" (QST Sept 20000, p62ff) - available as a pdf online. The "floating diode" design provides an interesting challenge for experimenters willing to tinker with germanium diodes, layout, components etc. NA5N replicated it in the Pipsqueak and RATT-3. But as Dave explains with clarity, it is somewhat contentious and probably not suitable as a Scout Radio!

Rob, with reference to another circuit, you ask "What is the source of this image?" It is another design by Charles Kitchin, easily found online - reliably reproducible. For your purpose, I would however recommend a clone of the MFJ-8100, which is sure-fire and fairly simple. A number of basic variants are readily available online.

Michael

27218. RE: [regenrx] Re: Experience with Kitchin's Simple Regen Radio for Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-11 12:02:04 UTC
From: dulmagedon@...
Topic: 27178 Message: 27218

You can take audio off many places. During a frey when people were worried about having HV in the headphones I surmised the headphones are only sensing changes in load and so hooked them in the B neg circuit instead. Worked perfectly. Sometimes the esoteric descriptions of how things including regens work are pure balderdash. It is really not that complicated. Tube Regens? For sure. I say it takes 100 transistors to equal one good tube.I know that is an overstatement but it makes the point. I build the solid state ones sometimes just to keep current. but real radios do glow in the dark. At least here at VE3LYX
donVe3LYX

27219. RE: [regenrx] moc3020 triac driver.....triac has a lot less sensitivity at low temperatures

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-11 14:24:11 UTC
From: Larry
Topic: 27163 Message: 27219

Below freezing. Check you data sheet for current required to turn on the triac at the low temperature. I know many engineers who do not read that spec. One lost his job when all the Canadian products failed in the winter.

It is just a good idea to design your projects for the proper use at all temperatures. SCRs and Triacs have that low temperature problem.

Larry

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Tuesday, October 11, 2016 12:48 AM
To: regenrx@yahoogroups.com
Subject: [regenrx] moc3020 triac driver.....triac has a lot less sensitivity at low temperatures

Please define low temperatures.
My current interest in triac control is to be used in table top PCB toner transfer projects using a laminator or a hot plate.
Pretty much indoor living space..kitchen temperature... 65 F to 75 F degrees.

Dreaming up other triac circuits.... basement flood pump... attic exhaust fan....
there really is no temperature below 38 degrees....
but
I saw an outdoor walkway lighting triac circuit that COULD be exposed to winter freezing temperatures..... so then I thought a 5 watt ceramic wire wound resistor could be used to keep the circuit humming.
http://www.learnmorsecode.com/help/triac/nightlight3.jpg

On 10/09/2016 10:41 AM, 'Larry' lbeaty@... [regenrx] wrote:

Rob, Just remember the triac has a lot less sensitivity at low temperatures. Should you ever have to work at low temperatures.

Larry

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Saturday, October 08, 2016 9:54 PM
To: regenrx@yahoogroups.com
Subject: [regenrx] moc3020 triac driver

The goal is control 8 amp hot plate or laminator heaters.
based on just one of the two heating elements in this circuit
http://www.learnmorsecode.com/help/triac/triaccontrol.jpg

this circuit runs a 100 watt light bulb without burning anything on the board.
yippeeeeee

http://www.learnmorsecode.com/laminator/pic/triacperf.jpg
good triac test.
First triac I ever used.

27220. RE: [regenrx] Re: Experience with Kitchin's Simple Regen Radio for Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-11 18:03:15 UTC
From: Hubert Miller
Topic: 27178 Message: 27220

Thanks for your input. I find it always worthwhile to hear about other's experiences and conclusions.
Hysteresis: i tentatively suggest – the diode below the 'knee voltage', has a variable resistance inverse to the source voltage. Enough that the forward resistance for very low

source voltage may be like 10k or even 20k (i don't remember exactly; it's been decades since i graphed that.)

When you back off the regen control, the RF voltage to the diode decreases => the series resistance of the diode (in the conduct cycle) increases => loading on the regen amp

stage decreases overall => this tends to counteract your decreasing the amplification of the regen stage.

As for the long (seconds) buildup to rollover, now that IS interesting. Obviously something has a long time constant, and i think it must be in the R and C post-diode.

It even occurred to me (maybe irrationally) that instead it might even be a junction heating effect in the diode. That might account for the long (relative) time up to the

rollover point.

The 'floating diode' circuit in this regen came into being because apparently Mr. Kitchin felt the FET would not so efficiently function as a detector, but that seems not to be

the case, as plenty of others have proven great results without bothering with a post-amp detector.

With a MOSFET RF amp, it won't detect (rectify RF) so you must go to a post-amplifier diode (or other detector).

I think Penfold's book showed a simple MOSFET receiver like this. I seem to recall a QST magazine project of a MOSFET dip-meter where the author said he was surprised to

be able to pick up international broadcasting on this homebrew test set.

-Hue

>See, that's the thing that always bugged me about the floating diode circuit -- for me, it was not reproducible, by which I mean that I used the floating diode in a number of different BJT regen circuits, and sometimes it worked, sometimes it didn't. When it didn't work, I got either poor sensitivity or hysteresis in the regeneration control, making it impossible to set the regen right on the edge of oscillation; inclusion of the diode would cause the circuit to slowly creep up closer and closer to oscillation (over a few seconds) until it snapped over and required the regen control to be reduced significantly to bring it back down below threshold.

So if you're going to experiment, I think it would be useful to see in which specific circuits it works well, and in which specific circuits it does not work well. I wrote up my very preliminary findings on this subject here:
http://theradioboard.com/rb/viewtopic.php?t=5790

Personally, I've given up on the floating diode because I like to experiment with unusual BJT oscillator configurations and I cannot predict in advance if the floating diode will work well or not. I just take the AF off of the emitter and add some more AF amplification.

Best regards,

mailto:qrp.gaijin@yahoo.com

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I asked how you (indefinite pronoun) using the diode leakage theory, explain the working of the “TAMAR regenerative radio kit”, which used capacitors

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That might be enough reward for me to go looking for it.

I’m thinking i see it this way: The DC level the diode output circuit depends on the load capacitance and resistance. If this combination of load values is such

that the driven stage input capacitance drains below peak before the next train of modulated RF pulses, the diode will never be back-biased by the load

capacitor to nonconduct. Or you could maybe say the R and C values never allowed the modulated pulses to be integrated. Diode current always flows

during the ‘conduct cycle’. You depend on the load R to drain the load C. C discharge path does not require a backward path thru the diode. (For good

reason this circuit is NOT used in rectifier circuits to deliver serious power.) If i’m right, relatively low load capacitance (to ground) and low load resistance

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I could be all wrong.....

This discussion has me itching to get out the breadboard again.

-H M

From: mailto:regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]

Sent: Monday, October 10, 2016 8:46 PM

To: mailto:regenrx@yahoogroups.com

Subject: RE: [regenrx] Re: Experience with Kitchin's Simple Regen Radio for Beginners

Hue wrote:

> The ‘diode leakage’ theory has to demonstrate a DC leakage path. With a low value capacitor in series, can you show me a DC path? I have tried the circuit with a capacitor in the 100s of pF – there is NO dc leakage thru such a cap.

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Best regards,

Dave

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ARRL HQ 1974-1977 and 1985-1996

27221. RE: [regenrx] Re: RS 2760419?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-12 21:46:51 UTC
From: Hubert Miller
Topic: 27089 Message: 27221

I noticed in this QST article of the Kitchin beginner’s circuit that there are special precautions taken with the placing of the diode-capacitor-resistor

series network. That maybe is a hint something not so good might happen in a freestyle homebuild. As in “might get squirrely”. Maybe not so

‘reproducible’. I think the series 22k resistor is to “de-reactive” the network. I wonder if it would be well to do the RF filtering before the resistor

instead of after it. Also i think maybe i’d try moving C5, the LM386 input capacitor, to the top of the volume pot. I note that C4, the diode series cap,

is 5x larger than C5, across the LM386 input. This is the kind of proportion you have to maintain to get best audio level out of the diode. I think.

For our overseas readers, “squirrel” is a small tree living rodent, with very sudden jumpy movements. So in electronics, it means “liable to be unstable”

-Hue

>Hello Curt

Are you building this circuit?

http://www.arrl.org/files/file/Technology/tis/info/pdf/0009061.pdf

Then make sure to use a genuine Germanium diode. Others are not working well in this kind of floating detector.

Best regard, Bernd

27222. Re: [regenrx] Re: RS 2760419?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-12 22:32:34 UTC
From: Michael
Topic: 27089 Message: 27222

This is a pertinenet observation, Hue.

The Pipsqueak version has some noteworthy modifications.
I think we discussed this many moons ago.

Here the Kitchen values and in brackets those of a Pipsqueak mod :-

R1+R2 1k+100k (200k), R3 1k (100k). R3 as 100k has been reported
as improving regen control. Kitchen follows the 1N34A and 0.01uF
directly with the AF pot and the LM386. The Pipsqueak inserts a
2N222 before the AF pot. Kitchen emphasises the importance of
layout around the 1N34A, as you note. This and the 100k R3 are probably
significant. It would be interesting hear of any exact
replication of Kitchin's design - and of the Pipsqueak mod.

References :

QST September 2000 p61ff
http://www.qsl.net/w/wb3gck//pipsqk.htm
http://www.qsl.net/wb3gck/pipsqk/pipsqk.gif

I might yet give it a try myself, but feel safer with a
TenTec 1253 or MFJ 8100 or similar clone.

Michael

On 12.10.16 22:46, Hubert Miller kargo_cult@... [regenrx] wrote:

I noticed in this QST article of the Kitchin beginner’s circuit that
there are special precautions taken with the placing of the
diode-capacitor-resistor series network. That maybe is a hint something
not so good might happen in a freestyle homebuild. As in “might get
squirrely”. Maybe not so

‘reproducible’. I think the series 22k resistor is to “de-reactive” the
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For our overseas readers, “squirrel” is a small tree living rodent, with very sudden jumpy movements. So in electronics, it means “liable to be unstable”

-Hue

27223. Re: [regenrx] Re: RS 2760419? MFJ8100

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-13 00:28:24 UTC
From: Rob
Topic: 27089 Message: 27223

Whats up with the MFJ8100???
Is there enough documentation to home brew the MFJ8100 ?

On 10/12/2016 06:32 PM, Michael michael.setaazul@...
[regenrx] wrote:
>
> This is a pertinenet observation, Hue.
>
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> I think we discussed this many moons ago.
>
> Here the Kitchen values and in brackets those of a Pipsqueak mod :-
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> R1+R2 1k+100k (200k), R3 1k (100k). R3 as 100k has been reported
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> I might yet give it a try myself, but feel safer with a
> TenTec 1253 or MFJ 8100 or similar clone.
>
> Michael
> ---------------------------
>
> On 12.10.16 22:46, Hubert Miller kargo_cult@... [regenrx] wrote:
>
> I noticed in this QST article of the Kitchin beginner’s circuit that
> there are special precautions taken with the placing of the
> diode-capacitor-resistor series network. That maybe is a hint something
> not so good might happen in a freestyle homebuild. As in “might get
> squirrely”. Maybe not so
>
> ‘reproducible’. I think the series 22k resistor is to “de-reactive” the
> network. I wonder if it would be well to do the RF filtering before the
> resistor
>

> instead of after it. Also i think maybe i’d try moving C5, the LM386
> input capacitor, to the top of the volume pot. I note that C4, the diode
> series cap,
>
> is 5x larger than C5, across the LM386 input. This is the kind of
> proportion you have to maintain to get best audio level out of the
> diode. I think.
>
> For our overseas readers, “squirrel” is a small tree living rodent, with
> very sudden jumpy movements. So in electronics, it means
> “liable to be unstable”
>
> -Hue
>
>

27224. Re: [regenrx] Re: RS 2760419? MFJ8100

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-13 00:58:39 UTC
From: qrp.gaijin@...
Topic: 27089 Message: 27224

In regenrx@yahoogroups.com, <roomberg@...> wrote :

> Whats up with the MFJ8100???
> Is there enough documentation to home brew the MFJ8100 ?

KR1S has some information on his experience homebrewing a similar set to the MFJ 8100:
http://theradioboard.com/rb/viewtopic.php?p=33299#p33299
http://theradioboard.com/rb/viewtopic.php?p=33299#p33299 .

There's also some information here:
http://zpostbox.ru/regenerative_receiver_the_last_of_the_mohicans.html
http://zpostbox.ru/regenerative_receiver_the_last_of_the_mohicans.html .

I've not built it myself, but everything I've read (from people who have built it)
indicates that is a reproducible and well-performing circuit.

Best regards,

qrp.gaijin@yahoo.com
http://qrp-gaijin.blogspot.com http://qrp-gaijin.blogspot.com

---In regenrx@yahoogroups.com, <roomberg@...> wrote :

Whats up with the MFJ8100???
Is there enough documentation to home brew the MFJ8100 ?

On 10/12/2016 06:32 PM, Michael michael.setaazul@... mailto:michael.setaazul@... [regenrx]
wrote:

This is a pertinenet observation, Hue.

The Pipsqueak version has some noteworthy modifications.
I think we discussed this many moons ago.

Here the Kitchen values and in brackets those of a Pipsqueak mod :-

R1+R2 1k+100k (200k), R3 1k (100k). R3 as 100k has been reported
as improving regen control. Kitchen follows the 1N34A and 0.01uF
directly with the AF pot and the LM386. The Pipsqueak inserts a
2N222 before the AF pot. Kitchen emphasises the importance of
layout around the 1N34A, as you note. This and the 100k R3 are probably
significant. It would be interesting hear of any exact
replication of Kitchin's design - and of the Pipsqueak mod.

References :

QST September 2000 p61ff
http://www.qsl.net/w/wb3gck//pipsqk.htm http://www.qsl.net/w/wb3gck//pipsqk.htm
http://www.qsl.net/wb3gck/pipsqk/pipsqk.gif http://www.qsl.net/wb3gck/pipsqk/pipsqk.gif

I might yet give it a try myself, but feel safer with a
TenTec 1253 or MFJ 8100 or similar clone.

Michael

On 12.10.16 22:46, Hubert Miller kargo_cult@... mailto:kargo_cult@... [regenrx] wrote:

I noticed in this QST article of the Kitchin beginner's circuit that there are special precautions taken with the placing of the diode-capacitor-resistor series network. That maybe is a hint something not so good might happen in a freestyle homebuild. As in "might get squirrely". Maybe not so

'reproducible'. I think the series 22k resistor is to "de-reactive" the network. I wonder if it would be well to do the RF filtering before the resistor

instead of after it. Also i think maybe i'd try moving C5, the LM386 input capacitor, to the top of the volume pot. I note that C4, the diode series cap,

is 5x larger than C5, across the LM386 input. This is the kind of proportion you have to maintain to get best audio level out of the diode. I think.

For our overseas readers, "squirrel" is a small tree living rodent, with very sudden jumpy movements. So in electronics, it means "liable to be unstable"

-Hue

27225. Re: [regenrx] MFJ8100, TenTec1253 and variants

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-13 00:52:47 UTC
From: Michael
Topic: 27089 Message: 27225

Rob, search for : TenTec 1253, MFJ 8100, MFJ 8100 Clone,
"Clone <MFJ 8100 Regen - F6BCU", T-Kit Model 1253 Receiver"
"The last of the Mahicans" (sic) from zpostbox.ru, Ozark Patrol,
"NM0S 4SQRP Regen", Antentop-01-2010, # 012 p 69ff,
Circuitsalad 2012/009, b.weber, posted here 07.08.2014

In these sources and elsewhere, you will find plenty on
the basic design and various mods, including simplified
variants which might be best suited to your purpose and
which would be easily reproducible.

Michael

On 13.10.16 01:28, Rob roomberg@... [regenrx] wrote:
>
> Whats up with the MFJ8100???
> Is there enough documentation to home brew the MFJ8100 ?

27226. RE: [regenrx] Re: RS 2760419?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-13 01:11:50 UTC
From: Hubert Miller
Topic: 27089 Message: 27226

It occurred to me also, in the ideal regen, you want as little "stuff" hanging off the tuned circuit.
In "A Simple Regn Receiver for Beginners"
http://www.arrl.org/files/file/Technology/tis/info/pdf/0009061.pdf

you have a diode and a load of something less than 120kR on the tuned circuit. The diode has
a variable capacitance when not conducting and a variable resistance when conducting, both varying with the voltage applied. I can see how that might complicate the operation of the regen
control. The circuit IS simple and so it IS reproducible by the homebuilder, but i can see how you
might have problems with the floating diode, floating off the tuned circuit, that is. An FET buffer
between the regenerative amp and the diode would maybe offer more "reproduciblity" with the floating diode and probably more gain than the same FET alone in an infinite-impedance detector,
but it doesn't have the virtue of absolute simplicity.
However, saying that, i suddenly remembered the 2 transistor (FET + bipolar) circuit published
here some time back, which gave wonderful sensitivity, with a minimum of parts.
-Hue

27227. Re: [Bulk] RE: [regenrx] Re: RS 2760419?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-13 01:27:48 UTC
From: Michael
Topic: 27089 Message: 27227

Hue, your link is, of course, to the original Kitchin design
we have been discussing, and which is known to be temperamental :-)

It is not always easy to find corroboration from enough different
reviewers on each of the many interesting-looking circuits found
on the web. Perhaps group members have suggestions. If a few designs
were recommended by many, that would be very useful!

The MRJ/TenTec is however fairly easy to reproduce and is well reviewed.

Michael
- - - - - - - - - - - - - -

On 13.10.16 02:11, Hubert Miller kargo_cult@... [regenrx] wrote:
>
>
> It occurred to me also, in the ideal regen, you want as little "stuff"
> hanging off the tuned circuit.

> In "A Simple Regn Receiver for Beginners"
> http://www.arrl.org/files/file/Technology/tis/info/pdf/0009061.pdf
>
> ... but it doesn't have the virtue of absolute simplicity.
> However, saying that, i suddenly remembered the 2 transistor (FET +
> bipolar) circuit published
> here some time back, which gave wonderful sensitivity, with a minimum of
> parts.
> -Hue

27228. Re: [regenrx] Re: RS 2760419? MFJ8100

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-13 02:18:31 UTC
From: Rob
Topic: 27089 Message: 27228

I bought an MFJ8100 at a hamfest 18 years ago for $80.
I took that radio with me whenever I traveled and had to overnight stay
in hotels.
I dropped a magnet wire out a window and listened to the world.
One night I heard CW 5 letter groups and I wrote out all the letters.
Not a single word was spelled on the paper. At the very end of the
transmission a woman's voice said
"thank you gentlemen".
I took that radio to Disney World to kill time in the evenings when the
grandchildren were sleeping.
I was stunned at the number of stations piled on top of each other from
all over the world.

I lent that radio out a bunch of times to beginner hams.... it always
was returned when they bought their own radios.
Then I lent it to my daughter for her kids.... I'll never see it again.

So as we are building radios I am always looking for THE ONE, THE BEST
ONE, that IS repeatable
and other builders can recommend.
And hearing the MFJ8100 IS such a circuit... I'm very interested.

On 10/12/2016 08:58 PM, qrp.gaijin@... [regenrx] wrote:
> In regenrx@yahoogroups.com, <roomberg@...> wrote :
>
> > Whats up with the MFJ8100???
> > Is there enough documentation to home brew the MFJ8100 ?
>
> KR1S has some information on his experience homebrewing a similar set
> to the MFJ 8100:
> http://theradioboard.com/rb/viewtopic.php?p=33299#p33299 .
>
> There's also some information here:
> http://zpostbox.ru/regenerative_receiver_the_last_of_the_mohicans.html .
>
> I've not built it myself, but everything I've read (from people who
> have built it) indicates that is a reproducible and well-performing
> circuit.
>
>
> Best regards,
>
>
> qrp.gaijin@...
>
> http://qrp-gaijin.blogspot.com

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>
>
> ---In regenrx@yahoogroups.com, <roomberg@...> wrote :
>
> Whats up with the MFJ8100???
> Is there enough documentation to home brew the MFJ8100 ?
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>
> On 10/12/2016 06:32 PM, Michael michael.setaazul@...
> <mailto:michael.setaazul@...> [regenrx] wrote:
>
> This is a pertinenet observation, Hue.
>
> The Pipsqueak version has some noteworthy modifications.
> I think we discussed this many moons ago.
>
> Here the Kitchen values and in brackets those of a Pipsqueak mod :-
>
> R1+R2 1k+100k (200k), R3 1k (100k). R3 as 100k has been reported
> as improving regen control. Kitchen follows the 1N34A and 0.01uF
> directly with the AF pot and the LM386. The Pipsqueak inserts a
> 2N222 before the AF pot. Kitchen emphasises the importance of
> layout around the 1N34A, as you note. This and the 100k R3 are
> probably
> significant. It would be interesting hear of any exact
> replication of Kitchin's design - and of the Pipsqueak mod.
>
> References :
>
> QST September 2000 p61ff
> http://www.qsl.net/w/wb3gck//pipsqk.htm
> http://www.qsl.net/wb3gck/pipsqk/pipsqk.gif
>
> I might yet give it a try myself, but feel safer with a
> TenTec 1253 or MFJ 8100 or similar clone.
>
> Michael
> ---------------------------
>
> On 12.10.16 22:46, Hubert Miller kargo_cult@...
> <mailto:kargo_cult@...> [regenrx] wrote:
>
> I noticed in this QST article of the Kitchin beginner’s circuit that
> there are special precautions taken with the placing of the
> diode-capacitor-resistor series network. That maybe is a hint
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> not so good might happen in a freestyle homebuild. As in “might get

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>
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> instead of after it. Also i think maybe i’d try moving C5, the LM386
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> series cap,
>
> is 5x larger than C5, across the LM386 input. This is the kind of
> proportion you have to maintain to get best audio level out of the
> diode. I think.
>
> For our overseas readers, “squirrel” is a small tree living
> rodent, with
> very sudden jumpy movements. So in electronics, it means
> “liable to be unstable”
>
> -Hue
>
>
>

27229. So many circuits, so little time...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-13 19:46:55 UTC
From: rhulett1@...
Topic: 27229 Message: 27229

Many apologies but what I thought would be simple and straightforward has turned into a rat's nest. All I was interested in doing was building two regen receivers manhattan style. One "simple" (I mistakenly thought "simple" in the name of an article would mean "simple"), one "complex". Have built the first and got all the fun out of it needed.

Now, attempting to move on the the "complex", I read about MFJ8100, Ten Tec, a "High Performance Regen", Desert Ratt 2 (and 3), one FET / one bipolar, etc...

Planning to build a 716 resonator radio basis at least two people who have had success. What is surprising is the plethora of variations on a century-old concept, many of which evidently work sometimes for some builders if components no longer readily available are used. When I look at the simple superhet or DC receiver, most are using a standard design. If wired correctly they will all work every time. I built a W7EL transceiver with cheap discrete components manhattan style and it worked beautifully from the beginning.

Is there a standard, bulletproof, stable, operable Regen design that can be replicated using readily available inexpensive modern components? It's strange to contemplate farmers in the 30's building radios to listen to AM broadcast with a few cheap parts.

73, Curt KB5JO

27230. Re: So many circuits, so little time...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-13 21:59:55 UTC
From: wb8yyy@...
Topic: 27229 Message: 27230

Curt

for simple, consider doing a homebrew version of the Ozark Patrol. It will workokay using any common npn for its 3 transistors. Only exotic parts are a variable cap and an audio transformer. It works amazing, using both audio and rf feedback it has agc like behavior against qsb.

For complex, consider the WBR. A more complex coil and a couple varactors gives a good cw receiver across one ham band.

my homebrew new 3 transistor transmitter should be skcc qrv one if these days, which reminds me, visit N5IB website for another candidate solid state regen.

73 Curt

27231. Re: So many circuits, so little time...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-14 00:01:04 UTC
From: rhulett1@...
Topic: 27229 Message: 27231

QSL N5IB's Bayou Jumper. I bought a pcb from him and built it awhile ago. It is stable and selective, paired it with a Twofer n had a 2xspy radio QSO with N5IB.

Thanks for the suggestions.

72 Curt KB5JO

27232. Re: So many circuits, so little time...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-14 00:32:18 UTC
From: rhulett1@...
Topic: 27229 Message: 27232

BTW, did Suzie ever get the Simple Regen to work without the 'scope attached. I happened on a thread from back in February that nearly duplicates my experience.

72 Curt KB5JO

27233. MFJ8100 and variants

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-14 01:14:08 UTC
From: Michael
Topic: 27089 Message: 27233

The following are variants of the reliable MFJ 8100
and all are fairly easy to reproduce:

TenTec 1253,
MFJ 8100 Clone,
"Clone MFJ 8100 Regen - F6BCU",
"T-Kit Model 1253 Receiver",
"The last of the Mahicans" (sic) from zpostbox.ru,
"Ozark Patrol",
"NM0S 4SQRP Regen",
Antentop-01-2010, # 012 p 69ff,
Circuitsalad 2012/009,
b.weber, posted here 07.08.2014

Searching for MFJ8100 or TenTec 1253 will locate
many files, such as those listed here.

Michael

27234. Re: So many circuits, so little time...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-14 11:50:55 UTC
From: david.newkirk@...
Topic: 27229 Message: 27234

Curt wrote:

> Is there a standard, bulletproof, stable, operable Regen design that can be replicated using readily available inexpensive modern components? It's strange to contemplate farmers in the 30's building radios to listen to AM broadcast with a few cheap parts.

Not so strange as un-useful. The "few cheap parts" that built a regen in the 1930s--and the audio transducer used with it--are quite different in 2016. The active device(s) available for the detector generally have much higher gain, including much higher gain at VHF, than the vacuum tubes of that time, and must be operated at generally much lower voltage. This makes them more efficient energywise, but easier to overload in a signal-handling sense and more prone to parasitic oscillations in an operational sense.

A one-triode audio amplifier driven by a triode detector could easily drive yesterday's high-impedance magnetic headphones to quite satisfactory volume, especially on reasonably strong AM broadcast signals. Without undertaking a significant investigative/design effort, you won't be able to duplicate this with two transistors, and maybe not at all. With a transistor detector followed by an integrated-circuit audio amplifier, yes, but this approach gives on other concerns.

IC audio amplifiers--especially ICs like the LM386 configured for maximum gain--driving today's low-impedance speakers, headphones, and earbuds are _deceptively_ simple, Without forethought and care given to proper delivery and routing of input signal, output signal, and power, they can quite easily oscillate at AF or RF, sometimes only on signal peaks, especially low-audio-frequency power peaks. (ICs of the LM386's general design can also generate RF hiss that required careful circuit-board layout and parasitic-oscillation suppression [that RC network to common across the device output] if they are not to compromise LW and MW reception.)

The first step in getting good, repeatable regen performance with minimal modern parts is to recognize that "simple" in 2016 is more complicated, and requires greater design and implementation care, than "simple" of 1936.

Best regards,

Dave
amateur radio W9BRD

27235. Re: So many circuits, so little time...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-14 13:02:37 UTC
From: qrp.gaijin@...
Topic: 27229 Message: 27235

In regenrx@yahoogroups.com, <david.newkirk@...> wrote :

> A one-triode audio amplifier driven by a triode detector
> could easily drive yesterday's high-impedance magnetic
> headphones to quite satisfactory volume, especially on
> reasonably strong AM broadcast signals. Without
> undertaking a significant investigative/design effort, you
> won't be able to duplicate this with two transistors, and
> maybe not at all.

Yes; it's tempting to think of "few transistors" as being equivalent to "simple design", but for regenerative receivers often the opposite is true, considering the complex dynamic behaviour of a single-transistor regenerative detector and all the ways it can misbehave. And sometimes low-transistor-count designs use reflexing, making the system even more complex and prone to misbehaviour. I personally do tend to favor low-transistor-count designs (having built and designed several), but I am careful not to fool myself into thinking that all such designs are "simple" or even readily reproducible. (The perennial and recently revived discussion surrounding the "simple regen" with the floating diode detector being one good example.)

One of my projects (progressing at a snail's pace) is building an old-fashioned, 6- or 7-transistor non-regenerative superhet. I used to look at all those transistors and think, "how complex!" But now, my reaction is in fact the opposite -- I see all those stable and fixed-frequency gain stages, the set-and-forget IF transformers, all capped off with a simple (and non-floating!) diode detector, and think, "what a simple, elegant design!"

> Dave

> amateur radio W9BRD

P.S. Dave -- still hoping http://dpnwritings.nfshost.com/ej/regenerative_receiver/ http://dpnwritings.nfshost.com/ej/regenerative_receiver/ will be updated someday!

Best regards,

qrp.gaijin@yahoo.com
http://qrp-gaijin.blogspot.com http://qrp-gaijin.blogspot.com

27236. Re: So many circuits, so little time...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-14 20:37:51 UTC
From: dawmast@...
Topic: 27229 Message: 27236

Building a higher performance regenerative receiver means separating detection and Q-Multiplying into two distinct stages with only the tank coil in common. Each stage is optimized for its purpose. For example the Junkbox Regen at https://circuitsalad.com/2014/12/06/another-excellent-performing-regen-circuit-coming-shortly/ https://circuitsalad.com/2014/12/06/another-excellent-performing-regen-circuit-coming-shortly/ and https://circuitsalad.com/2015/01/22/variation-on-junk-box-bipolar-regenerative-receiver/ https://circuitsalad.com/2015/01/22/variation-on-junk-box-bipolar-regenerative-receiver/

Putting regeneration and detecting into one single BJT regenerative stage is asking for a poor performance.

https://circuitsaladdotcom.files.wordpress.com/2015/07/2222a-regen_rev2.jpg

https://circuitsaladdotcom.files.wordpress.com/2015/07/2222a-regen_rev2.jpg

https://circuitsaladdotcom.files.wordpress.com/2015/07/2...
https://circuitsaladdotcom.files.wordpress.com/2015/07/2222a-regen_rev2.jpg

View on circuitsaladdotcom.f...
https://circuitsaladdotcom.files.wordpress.com/2015/07/2222a-regen_rev2.jpg
Preview by Yahoo

27237. Re: Experience with Kitchin's Simple Regen Radio for Beginners

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-14 20:51:24 UTC
From: dawmast@...
Topic: 27178 Message: 27237

I wouldn't use any floating diode as a detector in a regenerative receiver. Best practice is to use a BJT detector in stead which is connected onto the tap of the tank coil, the same tap on which the feedback capacitor C2 of 1 nF is connected from the emitter of the Q-Multiplier Q1.

Or use a Darlington pair as a detector in combination with a differential pair type Q-Multiplier. Advantage of this circuit that coil taps or links coils are not needed anymore, which makes band switching much more convenient.

https://www.uploadarchief.net/files/download/regen%20with%20darlington%20detector.gif
https://www.uploadarchief.net/files/download/regen%20with%20darlington%20detector.gif

https://www.uploadarchief.net/files/download/regen%20with%20darlington%20detector.gif

https://www.uploadarchief.net/files/download/regen%20wit...
https://www.uploadarchief.net/files/download/regen%20with%20darlington%20detector.gif

View on www.uploadarchief.net
https://www.uploadarchief.net/files/download/regen%20with%20darlington%20detector.gif
Preview by Yahoo

27238. Pentode Transconductance and Gain

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-14 23:24:33 UTC
From: J Ed
Topic: 27238 Message: 27238

Consider the 12CN5 tube. At 12.6v plate and screen, it has 3800 micromhos of transconductance and 40K plate resistance. Assume I want to use it as an RF amplifier ahead of a regenerative detector. Is there a decent way for me to translate those numbers into useful gain?

If it helps, assume my plate load is a 100 uH inductor and the frequency range is 3.45 to 4.05 MHz. These are all consideration points for a receiver I may want to build.

Ed AE7TE

27239. Re: Pentode Transconductance and Gain

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-15 01:27:35 UTC
From: david.newkirk@...
Topic: 27238 Message: 27239

Ed wrote:

> Consider the 12CN5 tube. At 12.6v plate and screen, it has 3800 micromhos of transconductance and 40K plate resistance. Assume I want to use it as an RF amplifier ahead of a regenerative detector. Is there a decent way for me to translate those numbers into useful gain?

I gather you want to know a gain _number_ for your potential stage. That will depend on many things, beginning with the degree of voltage step-up at the 12CN5 grid, and whether or not you tune the tube's plate to resonance or just use that 100-uH choke as a reasonably high impedance across which to develop output. It's hard to figure.

But consider the following, please. You're talking about operating your regen at 80 meters. Especially assuming that you'll want to use your transmitting antenna for receiving, a regen at that frequency will need loss, not gain, between its detector and the antenna system to maximize use of the receiver's restricted dynamic range. (Another way of saying this is the detector's noise floor will be much lower than the antenna system noise floor, and additional gain ahead of the detector will only worsen that relationship, making stronger signals overload the detector "sooner.") So what I recommend you first try instead is the following:

Configure your 12CN5 as a grounded-grid amplifier. Those 12-V-on-plate-and-screen tubes were generally designed to operate with their cathodes grounded for dc and their grids above dc ground through a high-value resistor--specs for the 12CN5 say 2.2 megs--to let "contact potential" bias do its thing. So connect a 2.2-meg resistor between Grid 1 and common, and then bypass the grid to common with 0.001 to 0.01 uF.

To use the tube's cathode as the RF input, connect between cathode and common an RF choke of a value high enough to provide a reactance of 3 k or more at 80 m, and then ac-couple your antenna system to the cathode via a 0.1-uF ceramic cap.

Assuming the tube biased to exhibit Gm of 3.8 mS (as the 12CN5 spec sheets show), the input impedance of the cathode will be 1/0.0038, or 263 ohms. That's equates to an 4.x-ish SWR relative to 50 ohms, but even with the low gain of the 12CN5 operating in grounded grid, your receiver will still be far too sensitive at 80 m to make full use of the detector's limited dynamic range, so the mismatch loss between your antenna system's 50 ohms and the cathode's 263 ohms will only act to your advantage.

What you want to do now is _add resistive attenuation_ between antenna and cathode to bring the antenna-system noise floor down to a level _just noticeably higher_ than your detector noise floor. You will probably end up with 15 to 20 dB of added attenuation, maybe even a bit more, between the antenna system and the 12CN5 cathode.

Between the I/O isolation afforded by the GG stage--although coupling between the 12CN5's hardwired-to-cathode Grid 3 and plate will offset this isolation a bit--and the further isolation afforded by 15 to 20 dB of additional attenuation, your detector will be nicely isolated from the antenna.

BTW, the foregoing assumes very light coupling between the RF amp plate and detector tank. I recommend 10 pF at 160 m, 5 pF at 80 m, and so on.

The page http://dpnwritings.nfshost.com/ej/wr/ http://dpnwritings.nfshost.com/ej/wr/ shows my implementation of this approach at 40 meters. The result is a very good CW/SSB receiver that doesn't frequency-pull on strong signals before my ears send me reaching for the AF GAIN control (or an RF attenuation pot if I had one installed).

Best regards,

Dave
amateur radio W9BRD

27240. Re: So many circuits, so little time...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-15 01:37:50 UTC
From: david.newkirk@...
Topic: 27229 Message: 27240

The detector attributed to Gi3XZM is such a one:
http://www.qsl.net/va3iul/Homebrew_RF_Circuit_Design_Ideas/80m-20m_Regen_RX_GI3XZM.gif
http://www.qsl.net/va3iul/Homebrew_RF_Circuit_Design_Ideas/80m-20m_Regen_RX_GI3XZM.gif

That circuit first appeared in the RSGB _Radio Communication_ column "Technical Topics," edited by the incomparable Pat Hawker, G3VA.

2N3904s, 2N2222s or other standard small-signal BJTs will do for the BC109s. Likewise MPF102s, 2N3819s, 2N4416s and more for the JFET.

Still have yet to try one of these. I believe that our own Les Smith has been greatly enjoying a GI3XZM detector at 80 meters Down Under...

Best regards,

Dave
amateur radio W9BRD

27241. RE: [regenrx] Re: So many circuits, so little time...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-15 03:42:02 UTC
From: Hubert Miller
Topic: 27229 Message: 27241

Thanks for posting this. Looks like a very straightforward circuit to assemble, with no kinks. I like the CW filter, which could be built in

as a switchable option.

-Hue

>The detector attributed to Gi3XZM is such a one:
http://www.qsl.net/va3iul/Homebrew_RF_Circuit_Design_Ideas/80m-20m_Regen_RX_GI3XZM.gif

That circuit first appeared in the RSGB _Radio Communication_ column "Technical Topics," edited by the incomparable Pat Hawker, G3VA.

2N3904s, 2N2222s or other standard small-signal BJTs will do for the BC109s. Likewise MPF102s, 2N3819s, 2N4416s and more for the JFET.

Still have yet to try one of these. I believe that our own Les Smith has been greatly enjoying a GI3XZM detector at 80 meters Down Under...

Best regards, Dave

amateur radio W9BRD

27242. Thread for success?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-15 11:03:49 UTC
From: rhulett1@...
Topic: 27242 Message: 27242

It seems a common thread for simple stable reproducible circuit is RF Amp, Regenerative detector, AF amp per N1TEV's "High Performance Receiver Design" Nov/Dec 1998 QEX.

Use a bipolar transistor for RF amp, JFET regenerative detector, IC or transistors for AF amp. The Bayou Jumper, GI3XZM, Junk Box special, High Performance SW Receiver are all based on this with a variable capacitance (diodes) used to adjust the regeneration and tune the radio. Using a Bipolar regen stage (like DR2) works better for AM. Seems variety of JFETs work, about any cheap Bipolar will work, nearly any diode will work.

Any other circuit variations like floating diodes and resonators may or may not work depending on unknown factors like components used, circuit construction, whether o'scope is attached, moon phase, etc?

72, Curt KB5JO

27243. Re: [regenrx] Re: Pentode Transconductance and Gain

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-15 17:48:46 UTC
From: J Ed
Topic: 27238 Message: 27243

> I gather you want to know a gain _number_ for your potential stage. That will depend on many things, beginning with the degree of voltage step-up at the 12CN5 grid, and whether or not you tune the tube's plate to resonance or just use that 100-uH choke as a reasonably high impedance across which to develop output. It's hard to figure.

I'm not looking for a quick answer. From reading your entire email, I think you have given me exactly the information I sought, or at least an excellent way of thinking about it. The goal is to understand the mechanics behind the circuit, not just find a circuit that will solve my problem.

> But consider the following, please. You're talking about operating your regen at 80 meters. Especially assuming that you'll want to use your transmitting antenna for receiving, a regen at that frequency will need loss, not gain, between its detector and the antenna system to maximize use of the receiver's restricted dynamic range. (Another way of saying this is the detector's noise floor will be much lower than the antenna system noise floor, and additional gain ahead of the detector will only worsen that relationship, making stronger signals overload the detector "sooner.") So what I recommend you first try instead is the following:

You're right - I may throw up a wire for testing the rig, but I'll likely use a sort of dipole or other wire antenna for use. I have used regens in the past but have mainly used them for AM BCB. Trying to get them to work better for shortwave is a goal I have.

> Configure your 12CN5 as a grounded-grid amplifier. Those 12-V-on-plate-and-screen tubes were generally designed to operate with their cathodes grounded for dc and their grids above dc ground through a high-value resistor--specs for the 12CN5 say 2.2 megs--to let "contact potential" bias do its thing. So connect a 2.2-meg resistor between Grid 1 and common, and then bypass the grid to common with 0.001 to 0.01 uF.

Interesting. I haven't used one as a grounded grid amplifier yet.

> To use the tube's cathode as the RF input, connect between cathode and common an RF choke of a value high enough to provide a reactance of 3 k or more at 80 m, and then ac-couple your antenna system to the cathode via a 0.1-uF ceramic cap.

So a 150 uH choke would work well for 80m. I could use one of those molded chokes or I could use a bunch of turns on a ferrite toroid core.

> Assuming the tube biased to exhibit Gm of 3.8 mS (as the 12CN5 spec sheets show), the input impedance of the cathode will be 1/0.0038, or 263 ohms. That's equates to an 4.x-ish SWR relative to 50 ohms, but even with the low gain of the 12CN5 operating in grounded grid, your receiver will

still be far too sensitive at 80 m to make full use of the detector's limited dynamic range, so the mismatch loss between your antenna system's 50 ohms and the cathode's 263 ohms will only act to your advantage.
> What you want to do now is _add resistive attenuation_ between antenna and cathode to bring the antenna-system noise floor down to a level _just noticeably higher_ than your detector noise floor. You will probably end up with 15 to 20 dB of added attenuation, maybe even a bit more, between the antenna system and the 12CN5 cathode.

I think I get it.

> Between the I/O isolation afforded by the GG stage--although coupling between the 12CN5's hardwired-to-cathode Grid 3 and plate will offset this isolation a bit--and the further isolation afforded by 15 to 20 dB of additional attenuation, your detector will be nicely isolated from the antenna.

So the signal levels from a good outside antenna need to be reduced to avoid overloading the regenerative detector. In all of the AM regens I've built, I've never had to do this and I never noticed any problems. What is different here?

> BTW, the foregoing assumes very light coupling between the RF amp plate and detector tank. I recommend 10 pF at 160 m, 5 pF at 80 m, and so on.

I'm guessing this is the same reason people use a tiny trimmer when building a regen where the detector is first.

> The page http://dpnwritings.nfshost.com/ej/wr/ shows my implementation of this approach at 40 meters. The result is a very good CW/SSB receiver that doesn't frequency-pull on strong signals before my ears send me reaching for the AF GAIN control (or an RF attenuation pot if I had one installed).
> Best regards,
> Dave
> amateur radio W9BRD

When using the 12CN5 as the detector itself, I've noticed that it will readily oscillate where other tubes didn't cooperate. If I used it as a straight detector, I assume I'd still need to use an attenuator ahead of the tuning tank? I've also considered having two tanks; one would be coupled to the plate circuit with a tickler winding and the other would be coupled to the antenna. The coils would be inductively coupled like an IF transformer, or one of Dave Schmarder's designs where the pancake coils are aimed at one another.

This is all very good information. Thanks for taking the time to respond.
Ed AE7TE

27245. Re: Pentode Transconductance and Gain

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-15 19:07:16 UTC
From: b_weeber@...
Topic: 27238 Message: 27245

** So the signal levels from a good outside antenna need to be reduced to avoid overloading
** the regenerative detector. In all of the AM regens I've built, I've never had to do this
and
** I never noticed any problems. What is different here?

A detector reaches it's best sensitivity for AM, if either the regeneration is just at the point or a tiny little bit into oscillation. Then it beaves a little bit like a synchron detector. When oscillating, the detector tends to lock into a strong signal. This behaviour is an advantage, when receiving AM signals, otherwise often you would hear a heterodyne tone.

When receiving SSB, the detector has to oscillate at one particular frequency ~1.5kHz away from the center of that receiving signal, to act as a BFO. Low frequencies of a voice are only 200-300Hz away from the detector frequency and sometimes they are strong, so the detector is tending, to lock into them. Now the detector is overloded.

To avoid/improve overloading:
- reduce the coupling between preamp and tank circuit
- build a tank circuit with a low impedanc (low L, high C values)
- turn the regeneration into a stronger oscillation
- when receiving CW, turn the detector frequency to a higher tone >= 1kHz
- use an rf attenuator and turn the signal down to just above the noise level.
- shielding the tank circuit, to avoid direct reception
Being able, to change the amplification of the preamp from +6dB to -40dB, would be perfect.

Best regards,
Bernd

27246. Re: [regenrx] Re: Pentode Transconductance and Gain

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-15 19:15:01 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27238 Message: 27246

RF signal attenuator

Certainly a most useful, I should say an essential part of a well designed regenerative receiver, is the signal attenuator between the antenna and the radio's input...

A step attenuator designed to work into a 50 ohms input impedance with steps of 0 dB, minus 3dB, minus 6 dB, minus 10 dB... then jump to minus 20 and minus 30 dB....

This will give you a very nice range of attenuation that helps to make the receiver behave better. That home built resistive attenuator with switches used ahead of a a good quality superheterodyne receiver will transform that radio into a very useful test instrument !!!

Using a dual tuned bandpass input filter after the resistive step by step RF attenuator will give the receiver very nice handling properties , turning it into a useful test instrument too.

A REGENERODYNE receiver using a well designed front end bandpass input filter and signal attenuator working into a variable gain RF amplifier that feeds a mixer that is coupled to the regenerative detector by means of a variable coupling that can be selected from the front panel....

73 and DX

Arnie Coro

CO2KK

On 15/10/16 14:53, b_weeber@... [regenrx] wrote:
>
>
> ** So the signal levels from a good outside antenna need to be reduced
> to avoid overloading
> ** the regenerative detector. In all of the AM regens I've built, I've
> never had to do this and
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> oscillation. Then it beaves a little bit like a synchron detector.
> When oscillating, the detector tends to lock into a strong signal.
> This behaviour is an advantage, when receiving AM signals, otherwise
> often you would hear a heterodyne tone.
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> When receiving SSB, the detector has to oscillate at one particular

> frequency ~1.5kHz away from the center of that receiving signal, to
> act as a BFO. Low frequencies of a voice are only 200-300Hz away from
> the detector frequency and sometimes they are strong, so the detector
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> noise level.
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> Best regards,
> Bernd
>
>
>

27247. Re: [regenrx] Re: Pentode Transconductance and Gain

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-15 19:37:55 UTC
From: J Ed
Topic: 27238 Message: 27247

I have a stepped attenuator similar to ones we all see in ARRL handbooks and other project websites. It consists of 8 DPDT switches and pads in the 1, 1, 2, 2, 5, 10, 20, 20dB ranges. You can use it to provide a total of 61 dB or any value in between.

I like the double-tuned method of bringing signal into the detector. I also like the idea of making a regenerative detector at, say, 1.8 MHz or so and then down-converting the incoming signal with a local oscillator. Maybe 1.8 MHz would be a bad IF but I'd have to think about it.

Ed AE7TE

On Sat, Oct 15, 2016 at 12:15 PM, 'Prof. Arnaldo Coro Antich' coro@... [regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> RF signal attenuator
>
> Certainly a most useful, I should say an essential part of a well designed
> regenerative receiver, is the signal attenuator between the antenna and the
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> receiver behave better. That home built resistive attenuator with switches
> used ahead of a a good quality superheterodyne receiver will transform that
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> A REGENERODYNE receiver using a well designed front end bandpass input
> filter and signal attenuator working into a variable gain RF amplifier that
> feeds a mixer that is coupled to the regenerative detector by means of a
> variable coupling that can be selected from the front panel....
>
> 73 and DX
>
> Arnie Coro
>
> CO2KK

>
> On 15/10/16 14:53, b_weeber@... [regenrx] wrote:
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> avoid overloading
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> advantage, when receiving AM signals, otherwise often you would hear a
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> frequency and sometimes they are strong, so the detector is tending, to
> lock into them. Now the detector is overloded.
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> - when receiving CW, turn the detector frequency to a higher tone >= 1kHz
> - Use an rf attenuator and turn the signal down to just above the noise
> level.
> Being able, to change the amplification of the preamp from +6dB to -40dB,
> would be perfect.
>
> Best regards,
> Bernd
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27248. Re: [Bulk] RE: [regenrx] Re: RS 2760419?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-15 20:21:35 UTC
From: Michael
Topic: 27089 Message: 27248

Don't shoot!

The 1987 RadCom issue featuring the GI3XZM Blooper is one
that is missing in my dusty pile. Sod's Law...

Searching for more info online, I happened on an
interesting investigation of the floating-diode enigma.
Build and minor mods made the plucky investigator a happy bunny

https://sites.google.com/site/linuxdigitallab/rf-ham-radio/aamazing-regen-receiver

If solid-state regen mistification persists, I may have to revisit
hollow-state :-)

Michael

On 13.10.16 02:11, Hubert Miller kargo_cult@... [regenrx] wrote:
>
> It occurred to me also, in the ideal regen, you want as little "stuff"
> hanging off the tuned circuit.
> In "A Simple Regn Receiver for Beginners"
> http://www.arrl.org/files/file/Technology/tis/info/pdf/0009061.pdf
> . . .

27249. Re: [regenrx] Re: Pentode Transconductance and Gain and more about circuit designs

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-15 20:28:32 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27238 Message: 27249

Dear amigo Ed AD7TE and other list members

After many experiments with the really amazing REGENERODYNE receivers.... here are some of my findings...

You want to enclose the regenerative detector stage inside the best possible shielding... That meaning a totally closed box with the voltages coming in via feedtrough capacitors, shielded wiring... decoupled plate and screen supplies ... You want that regenerative detector to be absolutely deaf... that is unresponsive to any signals trying to reach into that box that are not the signal coming from the output of the mixer at the front end. You test the quality of the shielded enclosure at night, with everything connected and NO SIGNALS within the detector's tuning range may be picked up. The ZL2JJ regenerative receiver mechanical construction gives a very good idea of what I am talking about here.

After many experiments, my choice for the detector tuning range is from 2.0 to 3.0 megaHertz for a one megaHertz tuning range, and a bandspread tuning from 2.0 to 2.5 megaHertz for slowly scanning by hand 500 kiloHertz...

Now let me explain... For an excellent 40 meters band receiver... you will need a 5.0 megaHertz quartz crystal, and the detector tuning range from 2.0 to 2.5 megaHertz, or even narrower from 2.0 to 2.2 megaHertz to tune the first 200 kiloHertz of 40 meters that are now supposedly exclusive for amateur radio around the world ... unfortunately this not true, as there are still some broadcasters using frequencies from 7.1 to 7.2 megaHertz.

If you carefully scan the HF segment between 1.8 and 3.5 megaHertz, you will exclude the 1.8 to 2.0 megaHertz if there is 160 meters band activity at night in your part of the world... in case you are not able to make a work of mechanical engineering art with fingerstock beryllium contacts for the top cover of the enclosure... 2.0 to 3.5 will give you a 1.5 megaHertz tuning range, that is quite good and an area of the HF spectrum that shows very little use nowadays , now if you have access to many good quality quartz crystals..you can increase the coverage of the receiver--- i.e. 10 mHz crystal will cover 12 to 15.5 megaHertz tuning range ... that includes the very popular 20 meters amateur band... A 8.0 megaHertz crystal will cover from 10 to 13.5 megaHertz , good for picking up the popular 25 meters international broadcast band that spans from around 11.6 to 12.2 megaHertz nowadays...

Opinions on this topic are invited !!! Pass along your personal experiences with the regenerative and regenerodyne receivers !!!

In my experiments, I also found out that the 5 megaHertz oscillator feeding the balanced mixer must be very clean from a spectral purity point of view, because you do not wave harmonics from the oscillator to reach the mixer...

By the way, my favorite regenerative detector circuit is the HARTLEY, using a pentode tube, with screen grid voltage control of the regeneration... Polishing the circuit I found out that the grid connection to the tank coil placed about 15 to 20 percent down the coil instead than at the top, was a good idea too...

My 2.0 to 3.0 megaHert tuning range original prototype detector is very sensitive and has a very smooth transition to reach the point of near oscillation, at the very edge of oscillating , something that provides very good selectivity... In a similar regenerative with a tuning range from 500 to 1500 kiloHertz built experimentally, it was possible to tune the upper and lower sidebands of AM broadcast stations...

Finally the power supply that you want for the REGENERODYNE or for a straight regenerative vacuum tubes receiver does require very good engineering... You want well regulated , well filtered DC on the filaments.. And a very smooth high voltage supply that if possible may be electronically regulated ....

On 15/10/16 15:37, J Ed jedwardsat1@... [regenrx] wrote:
>
>
> I have a stepped attenuator similar to ones we all see in ARRL
> handbooks and other project websites. It consists of 8 DPDT switches
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> about it.
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> Ed AE7TE
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> On Sat, Oct 15, 2016 at 12:15 PM, 'Prof. Arnaldo Coro Antich'
> coro@... <mailto:coro@...> [regenrx] <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>> wrote:
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> RF signal attenuator
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>
> 73 and DX
>
> Arnie Coro
>
> CO2KK
>
>
> On 15/10/16 14:53, b_weeber@... <mailto:b_weeber@...>
> [regenrx] wrote:
>> ** So the signal levels from a good outside antenna need to be
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>> they are strong, so the detector is tending, to lock into them.
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>> noise level.
>> Being able, to change the amplification of the preamp from +6dB
>> to -40dB, would be perfect.
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>> Best regards,
>> Bernd
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>

27250. Re: [regenrx] Re: Pentode Transconductance and Gain

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-16 00:48:48 UTC
From: david.newkirk@...
Topic: 27238 Message: 27250

Ed wrote:

> I also like the idea of making a regenerative detector at, say, 1.8 MHz or so and then down-converting the incoming signal with a local oscillator. Maybe 1.8 MHz would be a bad IF but I'd have to think about it.

Classical _band-imaging_ receivers -- http://dpnwritings.nfshost.com/ej/goodman_receiver/
http://dpnwritings.nfshost.com/ej/goodman_receiver/
-- used a detector operating at a spot frequency below or in the 160-meter band. The cool thing about this is that you can get two-band coverage with just one local-oscillator tuning range. A classical approach used a 5.2- to 5.7-MHz LO to convert 80 and 40 meters to 1.7 MHz with a regenerative detector, sometimes used non-oscillating and accompanied by a separate BFO, operating at that frequency. Nowadays 1.7 MHz is the uppermost carrier frequency in the :AM "expanded band," so I recommend _not_ using 1.7 MHz--even 1.843 MHz, for which cheap "clock rock" crystals are available for BFO and/or crystal filter experimentation.

My BG-4 superhet uses a homemade diode-ring mixer (with two-2N3904 post-mixer amp) and rebuilt Kenwood 4.9- 5.5-MHz VFO to bring 80 and 40 meters down to 1750 kHz. Harmonics from its oscillating detector make nice band-edge markers at 80 and 40, and anyway I never operate right down to the band edge anyway.

1843 kHz is a worthy IF for an 80/40 band-imaging CW receiver because the second harmonic of that frequency is above the 80-meter CW band (even if, as FCC may do "soon," the 80-meter subband upper limit is moved to 3650 kHz as a result of a rulemaking in progress).

And BTW a minimum-loss/"Cohn" CW filter with two 1843-kHz clock rocks and three 100-pF capacitors--910 ohm terminations--will be 200 Hz, or less, wide at its nose. Just sayin'... :-)

Best regards,

Dave
amateur radio W9BRD

27251. Re: [regenrx] Re: Pentode Transconductance and Gain

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-16 00:54:25 UTC
From: david.newkirk@...
Topic: 27238 Message: 27251

Ed wrote:

> So the signal levels from a good outside antenna need to be reduced to avoid overloading the regenerative detector. In all of the AM regens I've built, I've never had to do this and I never noticed any problems. What is different here?

Correspondent Weeber has summed it up well, but one more aspect is worth mentioning: "AM" reception as we traditionally think about it (demodulation AM with a _non_-oscillating detector) is significantly different from CW or SSB reception in that traditional "AM detection" involves use of the signal's own "carrier"--the central unchanging signal between the an AM signal's two mirror-image information-carrying sidebands--to heterodyne the sideband energy back to audio from RF. For the signal's own carrier to do the heterodyning work well, the signal must be strong enough to overcome any threshold effects in the AM detection device(s), be it/they a grid-leak detector (as in a classical vacuum-tube regenerative detector) or a traditional diode detector (as in a crystal radio, or the "AM detector" at the back end of the IF amplifier strip in a classical general-coverage receiver).

When, however, we supply the heterodyning carrier _locally_ for CW or SSB reception--or for AM detection with the signal carrier tuned at _zero beat_ so our locally supplied carrier supplant's the signal's own carrier--threshold effects are usually absent and we can hear all the way down to the band-noise floor.

So it is that a non-oscillating regenerative detector is generally considerably less sensitive than an oscillating regenerative detector. Or, to put it another way, a non-oscillating detector needs a much stronger signal for good AM reception than a detector that's oscillating for CW or SSB (or for AM reception with the incoming-signal carrier tuned to zero beat with--to the same frequency as--the detector's self-generated carrier.).

From this is follows that a non-oscillating detector is harder to overload in an audible way, whereas an oscillating detector can be overloaded in multiple ways, one of which--as b_weeber detailed--involves the frequency of the oscillating detector tending to be _pulled_ toward the frequency of the incoming signal as a result of oscillator physics.

I find, by the way, that for minimal pulling--or maximum pulling resistance, take your pick--dimensioning the detector-tank L and C such that their reactance is 100 ohms or less at the operating frequency is called for. Operating the detector at a lower frequency rather than a higher one also increases pulling resistance.

BTW, from the heyday of the regenerative detector I reproduce in my radio web pages the article "But Not for Voice," a writing that discusses the differences between "AM" (non-oscillating) and "CW" (oscillating) reception with regenerative detectors (http://dpnwritings.nfshost.com/ej/regenerative_receiver/kruse_but_not_for_voice.htm http://dpnwritings.nfshost.com/ej/regenerative_receiver/kruse_but_not_for_voice.htm).

Full disclosure: I happen to be entirely uninterested in using regenerative detectors for "AM" demodulation, concentrating for two-way work on CW (Morse code) operation as I do, and so my regens have been optimized for detector-oscillating reception only.

Best regards,

Dave
amateur radio W9BRD

27252. Re: Pentode Transconductance and Gain

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-16 02:24:34 UTC
From: qrp.gaijin@...
Topic: 27238 Message: 27252

In regenrx@yahoogroups.com, <b_weeber@...> wrote :
> - use an rf attenuator and turn the signal down to just above the noise level.
> - shielding the tank circuit, to avoid direct reception
> Being able, to change the amplification of the preamp
> from +6dB to -40dB, would be perfect.

On the topic of front-end attenuation, an experimenter at cqham.ru recently suggested the use of a bridge circuit to achieve attenuation. I thought this was an interesting idea that I hadn't seen before in most simple regen designs; most simple regen designs I've seen just use a variable resistor as a voltage divider to attenuate the antenna signal.

On the cqham.ru thread, it was claimed that with the bridge circuit, 60 dB or more attenuation was possible, if everything is built perfectly (good bridge balance, good shielding, good-quality variable resistor with minimal parasitic capacitance and/or compensation for the resistor's parasitic capacitance).

The discussion is here: http://www.cqham.ru/forum/showthread.php?14624-%CF%F0%EE%F1%F2%FB%E5-%F2%F0%E0%ED%E7%E8%F1%F2%EE%F0%ED%FB%E5-%F0%E5%E3%E5%ED%E5%F0%E0%F2%E8%E2%ED%FB%E5-%EF%F0%E8%B8%EC%ED%E8%EA%E8&p=1311410&viewfull=1#post1311410 http://www.cqham.ru/forum/showthread.php?14624-%CF%F0%EE%F1%F2%FB%E5-%F2%F0%E0%ED%E7%E8%F1%F2%EE%F0%ED%FB%E5-%F0%E5%E3%E5%ED%E5%F0%E0%F2%E8%E2%ED%FB%E5-%EF%F0%E8%B8%EC%ED%E8%EA%E8&p=1311410&viewfull=1#post1311410 , and the proposed bridge circuit is here:

http://www.cqham.ru/forum/attachment.php?attachmentid=245115&d=1476288737
http://www.cqham.ru/forum/attachment.php?attachmentid=245115&d=1476288737

http://www.cqham.ru/forum/attachment.php?attachmentid=245115&d=1476288737

http://www.cqham.ru/forum/attachment.php?attachmentid=24...
http://www.cqham.ru/forum/attachment.php?attachmentid=245115&d=1476288737

View on www.cqham.ru
http://www.cqham.ru/forum/attachment.php?attachmentid=245115&d=1476288737
Preview by Yahoo

Best regards,

qrp.gaijin@yahoo.com
http://qrp-gaijin.blogspot.com http://qrp-gaijin.blogspot.com

---In regenrx@yahoogroups.com, <b_weeber@...> wrote :

** So the signal levels from a good outside antenna need to be reduced to avoid overloading
** the regenerative detector. In all of the AM regens I've built, I've never had to do this and
** I never noticed any problems. What is different here?

A detector reaches it's best sensitivity for AM, if either the regeneration is just at the point or a tiny little bit into oscillation. Then it beaves a little bit like a synchron detector. When oscillating, the detector tends to lock into a strong signal. This behaviour is an advantage, when receiving AM signals, otherwise often you would hear a heterodyne tone.

When receiving SSB, the detector has to oscillate at one particular frequency ~1.5kHz away from the center of that receiving signal, to act as a BFO. Low frequencies of a voice are only 200-300Hz away from the detector frequency and sometimes they are strong, so the detector is tending, to lock into them. Now the detector is overloded.

To avoid/improve overloading:
- reduce the coupling between preamp and tank circuit
- build a tank circuit with a low impedanc (low L, high C values)
- turn the regeneration into a stronger oscillation
- when receiving CW, turn the detector frequency to a higher tone >= 1kHz
- use an rf attenuator and turn the signal down to just above the noise level.
- shielding the tank circuit, to avoid direct reception
Being able, to change the amplification of the preamp from +6dB to -40dB, would be perfect.

Best regards,
Bernd

27253. how to replace an electret microphone with a direct line in

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-17 02:49:56 UTC
From: Rob
Topic: 27253 Message: 27253

I have a small digital recorder that uses an ELECTRET microphone as input.
I would like to feed that digital recorder with a output from an MP3
PLAYER.

Can anyone advise me how to cut off that microphone and feed those two
wires with a line level audio signal?
I don't have any way to trace or produce a schematic for the digital
recorder so I just want to interface
where I can get to those two wires for the electret microphone.
I was considering replacing the electret microphone with a 600 ohm one
to one audio transformer to isolate the two circuits.

27254. Re: [regenrx] how to replace an electret microphone with a direct line in

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-18 05:41:57 UTC
From: kevin asato
Topic: 27253 Message: 27254

Biggest concern is that you need to remove the bias current source on the microphone circuit. Usually, but not always a resistor if about 1-2KOhms. The microphone input is AC/capacitor couple so the bias current is not present on the pre-amp input.

Give it a try with directly connecting to the microphone input and be careful of your signal level going into the pre-amp. Too much will overload it and the recorded audio will be distorted. If hum is detected, then you may wish to add a coupling transformer to break the ground loop condition.
73,
kevin
kc6pob

I have a small digital recorder that
uses an
ELECTRET microphone as input.

I would like to feed that digital recorder with a
output from an
MP3 PLAYER.

Can anyone advise me how to cut off that microphone
and feed those
two wires with a line level audio signal?

I don't have any way to trace or produce a
schematic for the
digital recorder so I just want to interface

where I can get to those two wires for the electret
microphone.

I was considering replacing the electret microphone
with a 600 ohm
one to one audio transformer to isolate the two
circuits.

27255. Globe Span Regen for Sale

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-18 19:38:00 UTC
From: Mike Dice
Topic: 27255 Message: 27255

See info at The New Radio Receiver Building Handbook

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| |
The New Radio Receiver Building Handbook
A shortwave radio, without use of satellites, will receive commercial free foreign government supported English ... | |

|

|

I purchased the PCB and have gathered nearly all the parts. Everything in parts list is included except wire for L1-L6 toroids, 10pf S/M caps, 120pf S/M caps, and items listed in miscellaneous category. I have the book the project is in, so I will include copies of the project pages as well as a couple of enlarged schematics. $20.00 Paypal includes shipping. Any questions please ask.
73, Mike

27256. 7.16 Resonator Regen Lives...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-18 21:51:07 UTC
From: rhulett1@...
Topic: 27256 Message: 27256

I built the 7.16 Resonator Radio, VK3YE mods by KB3BYT. It works, volume is acceptable for me without the darlington preamp in the circuit.

Here is the radio I built: http://www.learnmorsecode.com/716/716.html
http://www.learnmorsecode.com/716/716.html

Not wire wrap but Manhattan style, audio straight into an LM386 amplifier. Listening to 40M CW, tunes about 7-7.06.

Regeneration control is well behaved and the tuning is smooth with a 100 pF Air Variable I had.

Pictures later.

73, Curt KB5JO

27257. Re: [regenrx] 7.16 Resonator Regen Lives...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-18 22:44:37 UTC
From: Michael
Topic: 27256 Message: 27257

Thanks for the resurrection, Curt!

My first attempt was, er, unsatisfactory,
but I would like to try it again.

Could you post your *final* schematic. In particular
the regenerative component values appear to be determinant.

Michael

On 18.10.16 22:51, rhulett1@... [regenrx] wrote:
>
> I built the 7.16 Resonator Radio, VK3YE mods by KB3BYT. It works,
> volume is acceptable for me without the darlington preamp in the circuit.
>
> Here is the radio I built: http://www.learnmorsecode.com/716/716.html
...
> Regeneration control is well behaved and the tuning is smooth with a 100
> pF Air Variable I had.
...
> 73, Curt KB5JO

27258. Re: [regenrx] 7.16 Resonator Regen Lives...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-18 23:26:54 UTC
From: Rob
Topic: 27256 Message: 27258

Yes... please post pictures..... of the build and of the schematic.
I was very surprised that I had to vary my first pass at this circuit by
completely removing the 220K
resistor.... and landed with this mix of components:
http://www.learnmorsecode.com/716/VK3YEmodKB3BYTv2.jpg
for the receiver circuit.

On 10/18/2016 06:44 PM, Michael michael.setaazul@...
[regenrx] wrote:
>
> Thanks for the resurrection, Curt!
>
> My first attempt was, er, unsatisfactory,
> but I would like to try it again.
>
> Could you post your *final* schematic. In particular
> the regenerative component values appear to be determinant.
>
> Michael
>
> On 18.10.16 22:51, rhulett1@... [regenrx] wrote:
> >
> > I built the 7.16 Resonator Radio, VK3YE mods by KB3BYT. It works,
> > volume is acceptable for me without the darlington preamp in the
> circuit.
> >
> > Here is the radio I built: http://www.learnmorsecode.com/716/716.html
> ...
> > Regeneration control is well behaved and the tuning is smooth with a 100
> > pF Air Variable I had.
> ...
> > 73, Curt KB5JO
>
>

27259. Re: [regenrx] 7.16 Resonator Regen Lives...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-18 23:35:33 UTC
From: rhulett1@...
Topic: 27256 Message: 27259

Michael,

The circuit was Rob's circuit here: http://www.learnmorsecode.com/716/VK3YEmodKB3BYTv2.jpg
http://www.learnmorsecode.com/716/VK3YEmodKB3BYTv2.jpg
I used the same component values as shown in this schematic. The Audio output goes to the AF amp from the "simple" regen. I removed everything else from the board and built Rob's circuit Manhattan style.

GL n 72, Curt KB5JO

http://www.learnmorsecode.com/716/VK3YEmodKB3BYTv2.jpg

http://www.learnmorsecode.com/716/VK3YEmodKB3BYTv2.jpg
http://www.learnmorsecode.com/716/VK3YEmodKB3BYTv2.jpg

View on www.learnmorsecode.com http://www.learnmorsecode.com/716/VK3YEmodKB3BYTv2.jpg
Preview by Yahoo

27260. Re: [regenrx] 7.16 Resonator Regen Lives...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-18 23:36:45 UTC
From: rhulett1@...
Topic: 27256 Message: 27260

Rob,

The schematic is exactly the one you have shown. Pretty simple for something receiving 40M CW so readily.

I'll post pictures in a day or two when have time to take them. Into the box first.

72, Curt KB5JO

27261. Re: [regenrx] 7.16 Resonator Regen Lives...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-19 20:13:24 UTC
From: rhulett1@...
Topic: 27256 Message: 27261

I put a picture of the radio in the KB5JO album. Not much to it really, two 2n2222, an LM386, ceramic resonator. It tunes 7.005-7.075 MHz, hears CW quite nicely.

72, Curt KB5JO

27262. Re: [regenrx] 7.16 Resonator Regen Lives...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-20 13:22:40 UTC
From: dulmagedon@...
Topic: 27256 Message: 27262

I would like to try a CER' resonator in a tube transmitter circuit. 40M. Where does one get them and do they just sub in for a crystal or require different circuitry?
donVe3LYX

27263. Re: [regenrx] 7.16 Resonator Regen Lives...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-20 14:50:43 UTC
From: rhulett1@...
Topic: 27256 Message: 27263

I bought mine from Mouser 81-CSTLS7M16G53-A0 MFG Part No:CSTLS7M16G53-A0 CSTLS7M16G53-A0 Murata Resonators 24 cents each. Not sure of the voltage rating .

GL n 73, Curt KB5JO

27264. Re: Globe Span Regen for Sale

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-20 15:13:38 UTC
From: dawmast@...
Topic: 27255 Message: 27264

A very unusual regenerative receiver in which there is very much RF amplification between the regenerative stage and the detector stage. But beware the high frequency roll off at higher shortwave frequencies due to the Miller feedback capacitances between the collectors and the bases of the 2N3904s.

27265. OT: Guess I need a new clock for the shack, the old one's 'obsolete' :(

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-20 15:59:39 UTC
From: Phil
Topic: 27265 Message: 27265

Well, for quite some time now the shack clock has 'synced' exactly 12 hours fast. That is, 8:00AM shows as 8:00PM. No big deal (I have it set for 12:00 hr display, it wouldn't do "GMT") except that half a day each day the date and day display also is bonkers. Also, the daylight savings time feature doesn't display (I can manually set it, but when it syncs it goes away). . .

At first I thought that the 60kHz receiver may have died and it's not syncing each night, but that's NOT the case. It seems that NIST changed their format just enough (adding phase modulation as well as Amplitude modulation) to make many, if not all older 'atomic' clocks obsolete. They even say so on their web site.

It's a very nice large clock, displaying room temperature, day, date and time. Oh well, I only paid a little over $20 for it many years ago (maybe 15 years?). Guess I got my service out of it. After all, it's only money (which I don't have a lot of, LOL).

--
73 de Phil, KO6BB.
Specializing in DXing NDBs (Longwave Beacons).

Location: "The Beaconeer's Lair".
Merced, Central California, 37,18,37N 120,30,6W CM97rh
KO6BB/B beacon, ~20W to a Ringo Vertical 24/7 on 28.290 MHz.
http://www.qsl.net/ko6bb/

HF/LF RADIOS:
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
Icom: IC-7200 Xceiver, DSP IF & filters (~2015).
Kenwood: TS-450SAT Xceiver, cascaded 250/125Hz Inrad filters.
SDR: Softrock Ensemble II LF (built from a kit 2015).

ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 4 Port Antenna Multicoupler, Feeds 4 RX's.
AF Filters: Timewave DSP-599zx & HOMEBREW 8 Hz Filter.

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.
Cushcraft AR-10 Ringo at 14 feet AGL for 10M beacon.

27266. RE: [regenrx] OT: Guess I need a new clock for the shack, the old one's 'obsolete' :(

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-20 18:26:41 UTC
From: Hubert Miller
Topic: 27265 Message: 27266

I have two ‘atomic clocks’, one maybe 17 years old and the other maybe 12, and no apparent problems with either to date.
The older one sounds similar to yours. Spent $20 on it at the big box store and i reckon it’s one of the best $20 purchases i ever made.

BTW, not connected with above except for the 60 kHz ref: at a hamfest recently i bought a Palomar receiving loop antenna base and two loops.
One was stamped ‘WWVB’ and per description tunes something like 40 – 150 kHz. This loop had written on it in marker ink, “2-30 Meters”.
I wonder if the buyer made a big mistake? I wonder if he was surprised there was so little to hear on this band.
-Hue

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Thursday, October 20, 2016 9:00 AM
To: Regen group <regenrx@yahoogroups.com>
Subject: [regenrx] OT: Guess I need a new clock for the shack, the old one's 'obsolete' :(

Well, for quite some time now the shack clock has 'synced' exactly 12
hours fast. That is, 8:00AM shows as 8:00PM. No big deal (I have it
set for 12:00 hr display, it wouldn't do "GMT") except that half a day
each day the date and day display also is bonkers. Also, the daylight
savings time feature doesn't display (I can manually set it, but when it
syncs it goes away). . .

At first I thought that the 60kHz receiver may have died and it's not
syncing each night, but that's NOT the case. It seems that NIST changed
their format just enough (adding phase modulation as well as Amplitude
modulation) to make many, if not all older 'atomic' clocks obsolete.
They even say so on their web site.

It's a very nice large clock, displaying room temperature, day, date
and time. Oh well, I only paid a little over $20 for it many years ago
(maybe 15 years?). Guess I got my service out of it. After all, it's
only money (which I don't have a lot of, LOL).

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73 de Phil, KO6BB.
Specializing in DXing NDBs (Longwave Beacons).

Location: "The Beaconeer's Lair".
Merced, Central California, 37,18,37N 120,30,6W CM97rh
KO6BB/B beacon, ~20W to a Ringo Vertical 24/7 on 28.290 MHz.
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HF/LF RADIOS:
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
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ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 4 Port Antenna Multicoupler, Feeds 4 RX's.
AF Filters: Timewave DSP-599zx & HOMEBREW 8 Hz Filter.

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.
Cushcraft AR-10 Ringo at 14 feet AGL for 10M beacon.

27267. The "zero-tilt" receiver by Vladimir Novichkov.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-20 21:59:42 UTC
From: les.au49@...
Topic: 27267 Message: 27267

Vladimir Novichkov published an article "Frequency compensated LC networks for oscillators with the wide tuning range." At the end of the article he presents a circuit for a two tube receiver covering the frequency range 3.3 to 9.0 MHz.

He also provides a link to two u-tube videos where he demonstrates the operation of his receivers. The performance he gets from this set is astonishing in this respect: Tuning from 3.3 MHz to 9MHz he barely touches the regen control. He calls this feature "zero-tilt".

There are some difficulties with this receiver - specifically he has spent many hours 'tweaking' the circuit to get a flat response. Another is the tube he uses - 6AS6 "dual control" Clearly this receiver is well suited as the tunable IF in a regenerodyne receiver. So - I say forget the difficulty and build your own version of this design. It's superb! Suddenly I have become converted from the (Jones) super-gainer to regenerodyne.

Later (I can't give a reference) Vladimir presents other work on u-tube, showing other aspects of his study. In particular he presents a very convincing demonstration of variable selectivity with (I think) a later receiver. I don't understand the full significance of this - but it's interesting.

His work is so good, so astonishing - no one interested in regenerative receivers can ignore it. That's what I think.

Les

это хорошо!!

27268. Re: [regenrx] The "zero-tilt" receiver by Vladimir Novichkov.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-21 01:22:11 UTC
From: Paul Martin
Topic: 27267 Message: 27268

His work is discussed in depth on theradioboard.com on these two receivers as well as solid state versions. I intend to build the fet version of the variable bw version this winter as soon as I get my basement shop set up. I'm intrigued by the concept and would like to experiment further with it.

Paul

> On Oct 20, 2016, at 5:59 PM, les.au49@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
>
> Vladimir Novichkov published an article "Frequency compensated LC networks for oscillators with the wide tuning range." At the end of the article he presents a circuit for a two tube receiver covering the frequency range 3.3 to 9.0 MHz.
>
> He also provides a link to two u-tube videos where he demonstrates the operation of his receivers. The performance he gets from this set is astonishing in this respect: Tuning from 3.3 MHz to 9MHz he barely touches the regen control. He calls this feature "zero-tilt".
>
> There are some difficulties with this receiver - specifically he has spent many hours 'tweaking' the circuit to get a flat response. Another is the tube he uses - 6AS6 "dual control" Clearly this receiver is well suited as the tunable IF in a regenerodyne receiver. So - I say forget the difficulty and build your own version of this design. It's superb! Suddenly I have become converted from the (Jones) super-gainer to regenerodyne.
>
> Later (I can't give a reference) Vladimir presents other work on u-tube, showing other aspects of his study. In particular he presents a very convincing demonstration of variable selectivity with (I think) a later receiver. I don't understand the full significance of this - but it's interesting.
>
> His work is so good, so astonishing - no one interested in regenerative receivers can ignore it. That's what I think.
>
> Les
>
> это хорошо!!
>
>
>
>

27269. Re: [regenrx] The "zero-tilt" receiver by Vladimir Novichkov.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-21 02:25:26 UTC
From: les.au49@...
Topic: 27267 Message: 27269

Hello Paul,

First, I had no idea - none at all - that the circuit for a solid state version of this set had been published.

Next, I have a 2 'tube' set on the work-bench beside me that could serve as a starting point for such a receiver. It uses x2 6AK5 'toobs' - and the only difference between the base connection for the 6AK5 and the dual-control pentode is this: the 6AK5 connects G3 internally - the 6AS6 brings the 6AS6 to an external pin. My set uses the 6AK5 as (1) mixer and (2) detector - so you can see this will be a very convenient set to modify. (Or perhaps I should NOT modify the set I have. Perhaps I should keep it as a point of comparison?)

I will be more than interested to see/hear the result of your work. In my view (a view without any experience) this work by Vlad stands with the work of Frank Jones (he promoted the regen superhet, the Super-Gainer) and Garys' work with the regenerodyne. I think it makes a regenerodyne a practical set for on-air use for the basic home constructor. (I use the word, "on-air" to mean for 2 way communication, either SSB or CW.)

I have several questions. (1) Is there any chance of using a more common tube as the 'dual control' detector? e.g. 6AU6 or 12AU6 (or even a triode/pentode, such as the 6U8?)

(2) If some-one built a conventional "Jones" superhet, (fixed IF) would the 'no-tilt' circuit be an advantage? (I ask this question because I do not understand - at all - the control system that varies the tank circuit "Q".) Perhaps the AGC voltage generated would be a distinct advantage over a conventional Hartley detector? On the other hand, looking at the feed-back mechanism that provides 'no-tilt' regeneration, the principle of operation is both obvious and clever at the same time.

(3) How many others have build a (very solidly constructed) "VN" type receiver? (I think we need a name for this circuit, and I put forward the name "VN" detector. This is such a good circuit that I expect many more will be built, and it deserves a name.)

In terms of finding more information on "The Radio Board" - I used the clue you gave and searched for "The Radio Board". Then I used the link to "forums" and after that I searched for the name VladN. That got a good response, and I'll read these carefully. Alternately some-one might try this link: http://theradioboard.com/rb/index.php
http://theradioboard.com/rb/index.php

Thanks for sending those pointers (or links) Paul.
Very helpful.

Les

27270. Practical regen for on air use

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-21 10:12:42 UTC
From: dulmagedon@...
Topic: 27270 Message: 27270

I BTW take real issue with the concept that a regen is somewhat impractcal for on air use. Probably because I often use one of mine for such activity. A hartley based regen can be a real joy to run and lacks many of the bad habits of Armstrong style rigs. It rarely needs a touch on the regen control and can hear stuff your mega$ modern rig never will. Its biggest drawback . Too simple for most. Too few parts so how could it be any good concept. Someone once said they don't get such results. I never said it but I thought in my heart "Because you won't built it this way". Everyone wants to out think the next guy. First built it the way we know works and Then play with it to your hearts content. You will be amazed though or perhaps disappointed the number of times you discover the old simple design works better if you are honest with yourself . Anyway if Vlad design for instance interests you , build it. Exactly as he said at first. Not fair to judge it by postulating or building a variation of it. Regens can be finicky in design so follow his build exactly at first. Should only take a day or so and a few $. And if when you reach the playing around stage and you try something that sets it back be man enough to restore it to original design before going on.
donVE3LYX

27271. Re: [regenrx] 7.16 Resonator Regen Lives...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-21 11:08:47 UTC
From: david.newkirk@...
Topic: 27256 Message: 27271

Digikey has them as well:

http://www.digikey.com/product-detail/en/murata-electronics-north-america/CSTLS7M16G53-A0/490-12586-1-ND/5797568 http://www.digikey.com/product-detail/en/murata-electronics-north-america/CSTLS7M16G53-A0/490-12586-1-ND/5797568

I wonder if anyone has used resonators in the Colpitts configuration. The resonator-regen circuits I've seen so far connect one end terminal of the rez to the tuning C, the center terminal of the rez to common, and the other end terminal to/toward the detector active device. This puts the rez and tuning C in series to common, with one of the resonator's internal Cs in parallel with the tuning C and the other from the detector input to common.

Considering this, we can see why in some rez-regen demos, the detector stops, or gets close to stopping, oscillating at the low-C (higher-frequency) end of the tuning C's range: The less C in series with the rez to common, the more the detector is starved for feedback through the rez.

Turning the resonator "sideways" -- one end terminal to common, center terminal to device cathode/source/emitter, other end terminal to common -- would support using the rez in a Colpitts circuit, preferably with external augmentation of the part's relatively small internal capacitances (15 pF each in the part linked above). Getting maximum tuning range in this configuration might require a two-section tuning C.

Best regards,

Dave
amateur radio W9BRD

27272. Re: [regenrx] 7.16 Resonator Regen Lives...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-21 11:44:16 UTC
From: david.newkirk@...
Topic: 27256 Message: 27272

I wrote:

> Turning the resonator "sideways" -- one end terminal to common, center terminal to device cathode/source/emitter, other end terminal to common.

Oops, that end phrase there should be "other end terminal to detector device(s)."

W9BRD

27273. Re: The "zero-tilt" receiver by Vladimir Novichkov.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-21 12:15:37 UTC
From: david.newkirk@...
Topic: 27267 Message: 27273

Les wrote:

> His work is so good, so astonishing - no one interested in regenerative receivers can ignore it. That's what I think.

Well, I didn't ignore and did note Vlad's excellent R&D work, but from the standpoint of building a practical regen that's entirely satisfactory for two-way CW communication, in my opinion it adds quite a thick layer of gilt to an already sufficiently beautiful lily as far as I'm concerned.

The issue of detector "tilt"--feedback variation, and hence the need for regeneration-control adjustment, with frequency is (a) a regen _characteristic_ and not a problem; (b) a non-issue if you use a regen at a fixed IF; and (c) a non-issue in even in tunable ham-CW-band-only regens if you operate as I do with regeneration set considerably above critical. This is the case with the 80- and 40-meter versions of the circuit at http://dpnwritings.nfshost.com/ej/wr/ http://dpnwritings.nfshost.com/ej/wr/ : I just set regeneration at one spot and forget it -- for weeks, even months at a stretch if I don't happen to jostle the control while swapping gear in and out of my on-air lineup. And this is so even when, as is the case with my 40-m regen, I switch in enough C to bring the tuning range down far enough to listen to New York Radio/Gander Radio VOLMET SSB voice transmissions at 6604 kHz.

In the 1920s and 1930s, lockstep usage of regens -- built with tubes that had quite low amplification factor and transconductance compared to those of a decade or two later and beyond -- had hams using separate transmitting and receiving antennas, with the receiving antenna often just a hank of wire "around the picture molding" as the cliche goes. In those days, operating one's regen just above critical regeneration for maximum gain and sensitivity made sense.

Nowadays, with the local RF environment much, much noisier as a result of computers, switching power supplies, light dimmers and lamps that contain internal switching and/or RF-oscillator-driven power supplies, using the transmitting antenna (commonly positioned as far away from such noises as possible, and fed with coaxial cable or balanced line through a transmatch) for reception is good engineering practice. Using a regen for two-way work in such a system then requires (a) low-impedance antenna input and (b) as result of the relatively high signal levels available from such an antenna relative to yesteryear's hank of wire around the picture molding, RF _attenuation_-- which is to say "intentionally introduced signal _loss_" -- between detector and antenna.

This engineering equation immediately throws yesteryear's "operate the detector for maximum sensitivity and gain" tradition out the window. With that window so opened, the issue of detector "tilt"--feedback variation with tuning--is also subject to defenestration because a regen optimized for strong-signal work with a good antenna is intentionally operated significantly above critical regeneration, at which feedback-level setting _variations_ in feedback with tuning are unnoticeable within the CW portion of a ham band.

Best regards,

Dave
amateur radio W9BRD

27274. OT: Ordered two new shack clocks (changed the subject line)

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-21 14:28:51 UTC
From: Phil
Topic: 27274 Message: 27274

Thanks all,

I DID decide to go the old 'retro analog' route and ordered two 12" analog clocks, one for GMT and one for local time. NOT radio synced, and NOT the style that the second hand steps off in 1 second steps with a loud "Tick-Tock" (two of my wife's doctors have the tick-tock clocks in their examination rooms and I find myself saying to myself "Tick-Tock, the mouse ran up the clock". With two of them on the wall right over my head it would drive me batty. It seems that any "atomic" clocks are limited to basically USA (and sometimes HI and AK) time zones, and don't do GMT (you can set them manually, but that negates the WWVB sync function).

I must have looked at over 500 clocks and weighed one against the other, reading reviews etc. It seems that none were 100% "5 rated" and one has to read between the lines. I went to all the local big box stores, but couldn't find anything suitable locally (prefer to support local business).

These are the clocks I ordered, in classic black steel (not plastic). I really like the size (12 inches) as opposed to the more common 10" units. Guess it's the ex-military background and old-phart status I fit in At least these won't go obsolete if WWVB changes the time code again.Despite the name, they're Chinese (as is about everything now-a-days.

https://www.amazon.com/gp/product/B01GK53GGS/ref=od_aui_detailpages00?ie=UTF8&th=1

--

73 de Phil, KO6BB.
Specializing in DXing NDBs (Longwave Beacons).

Location: "The Beaconeer's Lair".
Merced, Central California, 37,18,37N 120,30,6W CM97rh
KO6BB/B beacon, ~20W to a Ringo Vertical 24/7 on 28.290 MHz.
http://www.qsl.net/ko6bb/

HF/LF RADIOS:
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
Icom: IC-7200 Xceiver, DSP IF & filters (~2015).
Kenwood: TS-450SAT Xceiver, cascaded 250/125Hz Inrad filters.
SDR: Softrock Ensemble II LF (built from a kit 2015).

ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 4 Port Antenna Multicoupler, Feeds 4 RX's.
AF Filters: Timewave DSP-599zx & HOMEBREW 8 Hz Filter.

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.
Cushcraft AR-10 Ringo at 14 feet AGL for 10M beacon.

27275. Re: [regenrx] OT: Ordered two new shack clocks (changed the subject line)

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-21 14:46:14 UTC
From: Bill Stewart
Topic: 27274 Message: 27275

Phil,
I'm late for this party and you may be looking for analog clocks, but La Crosse has several digital models that do GMT or Local times. I use a couple for GMT w/ WWVB calib, in/out temp, date and day. Big numbers too. Hard to beat that ole time look with the analog ones tho...73 de Bill K4JYS

----- Original Message -----

From: "Phil ko6bb1@... [regenrx]" <regenrx@yahoogroups.com>
To: "Regen group" <regenrx@yahoogroups.com>
Sent: Friday, October 21, 2016 10:28:51 AM
Subject: [regenrx] OT: Ordered two new shack clocks (changed the subject line)

Thanks all,

I DID decide to go the old 'retro analog' route and ordered two 12"
analog clocks, one for GMT and one for local time. NOT radio synced,
and NOT the style that the second hand steps off in 1 second steps with
a loud "Tick-Tock" (two of my wife's doctors have the tick-tock clocks
in their examination rooms and I find myself saying to myself
"Tick-Tock, the mouse ran up the clock". With two of them on the wall
right over my head it would drive me batty. It seems that any "atomic"
clocks are limited to basically USA (and sometimes HI and AK) time
zones, and don't do GMT (you can set them manually, but that negates the
WWVB sync function).

I must have looked at over 500 clocks and weighed one against the other,
reading reviews etc. It seems that none were 100% "5 rated" and one has
to read between the lines. I went to all the local big box stores, but
couldn't find anything suitable locally (prefer to support local business).

These are the clocks I ordered, in classic black steel (not plastic). I
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in At least these won't go obsolete if WWVB changes the time code
again.Despite the name, they're Chinese (as is about everything now-a-days.

https://www.amazon.com/gp/product/B01GK53GGS/ref=od_aui_detailpages00?ie=UTF8&th=1

--

73 de Phil, KO6BB.
Specializing in DXing NDBs (Longwave Beacons).

Location: "The Beaconeer's Lair".
Merced, Central California, 37,18,37N 120,30,6W CM97rh

KO6BB/B beacon, ~20W to a Ringo Vertical 24/7 on 28.290 MHz.
http://www.qsl.net/ko6bb/

HF/LF RADIOS:
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
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Kenwood: TS-450SAT Xceiver, cascaded 250/125Hz Inrad filters.
SDR: Softrock Ensemble II LF (built from a kit 2015).

ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 4 Port Antenna Multicoupler, Feeds 4 RX's.
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ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.
Cushcraft AR-10 Ringo at 14 feet AGL for 10M beacon.

27276. Re: The "zero-tilt" receiver by Vladimir Novichkov.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-21 15:06:21 UTC
From: qrp.gaijin@...
Topic: 27267 Message: 27276

In regenrx@yahoogroups.com, <les.au49@...> wrote :

> Vladimir Novichkov published an article "Frequency compensated
> LC networks for oscillators with the wide tuning range."

> The performance he gets from this set is astonishing in this respect:
> Tuning from 3.3 MHz to 9MHz he barely touches the regen control.
> He calls this feature "zero-tilt".

Yes, I also find the work very interesting and entertaining. I find his work beautiful not necessarily because it is practical, but rather because it applies logic, mathematics, and engineering to wrestle under control one of the regenerative receiver parameters (the tilt) that is normally considered uncontrollable.

I personally and have successfully built several prototype receivers using these methods. As was already noted, there is a lot of discussion (much of it from me, as I was asking Vladimir several questions) on TheRadioBoard.com.

My advice to you is to first build a regenerative receiver based on a Vackar oscillator. This is easy. Then, confirm that the tilt is opposite of the "normal" tilt, i.e. the tendency for oscillation will decrease with increasing frequency.

Then, modify your circuit to remove the Vackar feedback path (make the Vackar feedback capacitor something like 100 nF) and in the other "class 1" feedback path (Hartley, Armstrong, or Colpitts). Then, verify that the tilt is "normal", i.e. tendency for oscillation increases with increasing frequency.

Once you have achieved this, then simply balance the two feedback paths and adjust the total feedback level. The key concept (read it a few times until you "get" it) is stated by Vladimir here:

http://theradioboard.com/rb/viewtopic.php?p=39865#p39865
http://theradioboard.com/rb/viewtopic.php?p=39865#p39865
He says: "Increasing tickler turns and decreasing C28 [Vackar capacitor] increases the total feedback. Changing only one of the two values changes both the tilt and total feedback. Changing tickler turns and C28 [Vackar capacitor] in the same direction changes the tilt."

I find it useful to think of the feedback paths in terms of reactances: decreasing the reactance of the Vackar feedback path reduces the amount of Vackar feedback. Decreasing the reactance of the tickler coil reduces the amount of Armstrong feedback.

> In particular he presents a very convincing demonstration of
> variable selectivity with (I think) a later receiver. I don't
> understand the full significance of this - but it's interesting.

The idea and significance are simple: keep the amplifier always in class A operation, and limit the oscillation amplitude not by driving the device into non-linearity (which is

poorly-characterised and difficult to control), but instead by having a separate active device (another tube or another transistor) that acts to limit the oscillation amplitude. Then, importantly, this separate limiter must act according to a well-characterised and scale-invariant compression law. This means that no matter how large or how small the oscillation amplitude, the amount of gain compression must be the same. If this condition is met, then even as you adjust the oscillation amplitude above threshold, the bandwidth of the oscillating regenerative receiver *will not change*. The above-threshold bandwidth depends on the gain compression law, which then determines the ultimate regenerative gain and selectivity. Then, by altering the gain compression law (by adjusting the appropriate circuit parameters), we can adjust the above-threshold bandwidth in a controlled manner.

The takeaway? You have independent control of oscillation amplitude and bandwidth. You can run the regen hard into oscillation without the widening (whitening) of the bandwidth that occurs in classical single-device regens. Hard oscillation is good of course for SSB/CW reception. Alternatively, you can run the regen very weakly oscillating, for synchronous reception of AM by injection locking. And again, you can control the bandwidth *independently of the oscillation amplitude* (by adjusting the limiter parameters).

And finally, another interesting property of keeping the amplifier always in class A (and using a separate limiter) is that the influence of the regeneration control on the oscillator's frequency can be reduced to practically zero (explanation here: http://theradioboard.com/rb/viewtopic.php?f=1&t=5153 http://theradioboard.com/rb/viewtopic.php?f=1&t=5153). Another regen "quirk" understood, analysed, and controlled!

> His work is so good, so astonishing - no one interested in
> regenerative receivers can ignore it. That's what I think.

I agree. Again, it's not so much a question of whether the scheme brings practical benefits or not. It's the fact that these hitherto uncontrollable parameters have been so precisely analysed and so cleanly brought under control. It's a fascinating beacon of light that illuminates previously unexplored areas of regen design.

Just FYI, the experimenters on the Russian forum cqham.ru are quite fond of Vladimir's ideas. Unfortunately, these ideas don't seem to have caught on in the English-speaking world. Apart from the many experimenters on cqham.ru, I can think of only less than 5 people that I know of who have accepted and experimented with the hybrid feedback/zero-tilt ideas.

Zero-tilt is also useful for making an amplitude-stable oscillator for a VFO. This can be useful when making a varactor-tuned oscillator (VCO) where tank voltages must be kept low to avoid tank voltages detuning the varactor. The usual approach is to use AGC. But hybrid feedback allows a simpler, passive, non-Q-degrading approach to evening out the oscillation level in a wide-range VFO.

My final recommendation for thorough understanding is to read, understand, and reproduce every simulation result in Vladimir's papers (in particular the open-loop oscillator analyses and frequency sweeps of peak amplifier response). I have done this (through a long and error-riddled learning process) and my results are mostly posted on TheRadioBoard.com. I can probably assist if you have any questions about running these sorts of simulations to confirm or design for zero-tilt. My personal interest was applying these ideas to 1.2-volt BJT detectors, which I was successfully able to do and which was a great deal of fun.

Enough for now. :-)

Best regards,

qrp.gaijin@yahoo.com
http://qrp-gaijin.blogspot.com http://qrp-gaijin.blogspot.com

27277. Re: The "zero-tilt" receiver by Vladimir Novichkov.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-21 15:22:16 UTC
From: qrp.gaijin@...
Topic: 27267 Message: 27277

One more comment about hybrid feedback/zero-tilt receivers: make sure you use high-quality, RF-grade capacitors for the Vackar feedback capacitance. If you don't, you will introduce unpredictable losses into the tank which will upset the tilt. I didn't understand this at first and spent several days (weeks?) trying to understand why I could never confirm the "reversed" tilt that must be present in a properly-functioning Vackar-based regen. After I finally used high-Q NP0 ceramics, then I started to get the results i expected.

Hence my previous advice: get the Vackar-based regen working first. That will show you if you have something wrong or not (low-Q capacitors, parasitic feedback paths, low-Q coil, etc.).

Best regards,

qrp.gaijin@yahoo.com
http://qrp-gaijin.blogspot.com http://qrp-gaijin.blogspot.com/

27278. FS: Heathkit HW30 Transceivers $30 each

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-21 15:32:10 UTC
From: Bry Carling
Topic: 27278 Message: 27278

Two Meter AM is alive!

FS: Two Heathkit HW30 Benton Harbor Lunchboxes! Crystal-controlled transmitter, and a tunable superregenerative receivers with RF stage. The transmitters with up to 5-watt input are more than adequate for "local" net operations and the communication range of all models is unlimited under "skip" conditions. Other features include: frequency multipliers on the 6 & 2 meter versions to provide straight-through finals from an oscillator using a fundamental crystal in the 8 mc range; built-in final amplifier metering jack, and "press-to-talk" transmit/receive switch on the front panel with "transmit-hold" position.

These are almost complete and being sold "as-is."

Will include docs and a manual copy.

One has a meter added. One has a power cable. I also have the original MICs for these for additional $$.

First come, first served. Your choice if you are first!

TWOers available for $30.00 each plus shipping.

Original Astatic microphone for Twoer = $30.00 OR - if purchased WITH a TWOer, then $25.00 each.

ALSO - I have two 8025 kHz Crystals for use with the TWOer to go on the popular 144.450 MHz AM callling frequency - $16.00 each or if purchased WITH a TWOer, then $10.00 each.

Shipping additional.

Pictures and details at:
http://af4k.com/radios.htm

73 - Bry Af4K

27279. Re: [regenrx] The "zero-tilt" receiver by Vladimir Novichkov.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-21 15:34:26 UTC
From: qrp.gaijin@...
Topic: 27267 Message: 27279

In regenrx@yahoogroups.com, <les.au49@...> wrote :

> In terms of finding more information on "The Radio Board" -
> I used the clue you gave and searched for "The Radio Board".
> Then I used the link to "forums" and after that I searched for the
> name VladN. That got a good response, and I'll read these carefully.

Here are some specific links from TheRadioBoard.com about hybrid feedback receivers and other related regenerative receiver topics. Plenty of good ideas here.

regen/VFO with reduced feedback dependence on frequency - The RadioBoard Forums
http://theradioboard.com/rb/viewtopic.php?t=3714

http://theradioboard.com/rb/viewtopic.php?t=3714

regen/VFO with reduced feedback dependence on f...
http://theradioboard.com/rb/viewtopic.php?t=3714 Most wideband regen RXs require substantial adjustment of regen level as you tune across the band.

View on theradioboard.com http://theradioboard.com/rb/viewtopic.php?t=3714
Preview by Yahoo

vladn: solid state frequency-compensated regen? - The RadioBoard Forums
http://theradioboard.com/rb/viewtopic.php?t=4161

http://theradioboard.com/rb/viewtopic.php?t=4161

vladn: solid state frequency-compensated regen? - The...
http://theradioboard.com/rb/viewtopic.php?t=4161 Switching to this thread (since the subject is not Clapp specific). This is a continuation of this thread:
http://theradioboard.com/rb/viewtopic...

View on theradioboard.com http://theradioboard.com/rb/viewtopic.php?t=4161
Preview by Yahoo

Designing class-A solid-state regen w/explicit AAC loop - The RadioBoard Forums
http://theradioboard.com/rb/viewtopic.php?f=4&t=5171

Designing class-A solid-state regen w/explicit AAC loop - The RadioBoard Forums
http://theradioboard.com/rb/viewtopic.php?f=4&t=5171 Re: Designing class-A solid-state regen w/explicit AAC loop Postby vladn » Wed Oct 30, 2013 2:53 am Here are some notes for the circuit:

View on theradioboard.com http://theradioboard.com/rb/viewtopic.php?f=4&t=5171
Preview by Yahoo

6AS6 regen, mk2 - The RadioBoard Forums
http://theradioboard.com/rb/viewtopic.php?f=3&t=5112

http://theradioboard.com/rb/viewtopic.php?f=3&t=5112

6AS6 regen, mk2 - The RadioBoard Forums
http://theradioboard.com/rb/viewtopic.php?f=3&t=5112 The original 6AS6 detector was a proof of concept design for a hybrid feedback in oscillators/regens.

View on theradioboard.com http://theradioboard.com/rb/viewtopic.php?f=3&t=5112
Preview by Yahoo

t: reducing the frequency shift above the osc. threshold - The RadioBoard Forums
http://theradioboard.com/rb/viewtopic.php?f=1&t=5153

t: reducing the frequency shift above the osc. threshold - The RadioBoard Forums
http://theradioboard.com/rb/viewtopic.php?f=1&t=5153 t: reducing the frequency shift above the osc. threshold Postby vladn » Tue Oct 22, 2013 1:38 am

View on theradioboard.com http://theradioboard.com/rb/viewtopic.php?f=1&t=5153
Preview by Yahoo

tube+ss discussion, how the throttle capacitor really works? - The RadioBoard Forums
http://www.theradioboard.com/rb/viewtopic.php?t=4516

http://www.theradioboard.com/rb/viewtopic.php?t=4516

tube+ss discussion, how the throttle capacitor really wo...
http://www.theradioboard.com/rb/viewtopic.php?t=4516 Update as promised.

View on www.theradioboard.com http://www.theradioboard.com/rb/viewtopic.php?t=4516
Preview by Yahoo

t: ARC + Q.multiplier = wide range AGC ? - The RadioBoard Forums
http://theradioboard.com/rb/viewtopic.php?t=4629

http://theradioboard.com/rb/viewtopic.php?t=4629

t: ARC + Q.multiplier = wide range AGC ? - The RadioBo...
http://theradioboard.com/rb/viewtopic.php?t=4629 Thinking about John's work on ARC in regens: http://cool386.tripod.com/arc/automatic_regen.html as well as the fairly recent d...

View on theradioboard.com http://theradioboard.com/rb/viewtopic.php?t=4629
Preview by Yahoo

Best regards,

qrp.gaijin@yahoo.com
http://qrp-gaijin.blogspot.com http://qrp-gaijin.blogspot.com

27281. RE: [regenrx] Re: OT: Guess I need a new clock for the shack, the old one's 'obsolete'

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-21 16:55:08 UTC
From: Hubert Miller
Topic: 27280 Message: 27281

I am pleasantly surprised how reliably the ‘atomic clocks’ sync up here, in a high-noise environment and an apartment with high level of
radio wave attenuation.
I have seen the ads for the ‘atomic watch’ and i really wonder how something that small can have an effective 60 kHz antenna.
-Hue

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Friday, October 21, 2016 9:03 AM
Subject: [regenrx] Re: OT: Guess I need a new clock for the shack, the old one's 'obsolete'

I had trouble with them -- worked for a couple of years (I'm in
Delaware), then propagation conditions changed and clocks would no
longer sync.

73 /paul W3FIS

–’–·–’–––

27282. Re: 7.16 Resonator Regen Lives...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-21 19:50:10 UTC
From: Peter Wotherspoon
Topic: 27256 Message: 27282

Don, I can send u one.
I have 7.02 That I bends from 7.0 - 7.04.Mine are 3 leggy ones.
Peter/near u /near my namesake borough.

27283. Size of good bandspread cap?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-21 21:01:14 UTC
From: Hubert Miller
Topic: 27283 Message: 27283

I harvested a couple tuning caps from an old Link FM deviation measuring instument.
One, 5 pF and the other 25 pF max. Is the 25 a good size for bandspread tuning?
This would make a good vfo cap as the plates are quite thick, not bendable at all.
What about a use for the 5 pF ? Too small except maybe for antenna coupling?

Also, i measured a set of Brush piezo headphones. They show about 1.5M ohm and
500 pF. This is a working set. I know the lit describes the actual capacitance in the
several nF range. I don't know how to account for this 500 pF measurement except
that the low cost tester i used is confused by the parallel resistance. I don't know if
the 2 sides are wired series or parallel.
The AADE tester i tried rejected the test, apparently due to the parallel resistance.
-Hue

27284. Paraset copy

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-21 21:02:35 UTC
From: William Wood
Topic: 27284 Message: 27284

Greetings Folks
Sorry for the blatant advertising, but really
I have no monitory connexions to this kit, just
interested in it myself. I know regen is the
name of the game here, and this kit is a
transceiver with a regen receiver…
Have been told the receiver works pretty well
and hopefully when the kit is kitted it won't cost
an arm and a leg :) Anyway thought one or two
of you guys might be interested in a solid state
version of the Parast transceiver…
73 fer now
Bill KE9XQ

https://groups.yahoo.com/neo/groups/4sqrp/photos/photomatic/2014075989

27285. RE: [regenrx] Paraset copy

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-21 21:06:00 UTC
From: Hubert Miller
Topic: 27284 Message: 27285

This is what i found there:

"Oops!
You need to be a member to perform this action."

27286. 400 Hz power transformers for audio

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-21 21:11:30 UTC
From: Hubert Miller
Topic: 27286 Message: 27286

I recently scrapped a microwave signal generator - the fact that it was 400 Hz powered was the decisive factor in the decision.
I got a really nice portable carry case, a bunch of tubes, and three 400 Hz power transformers. The power transformers may
be the best of this lot: they have multiple HV and low voltage windings. I just measured one winding at 20H and by strapping
another HV or two secondary, i'm pretty confident i can get a choke of 35H or so. Also for crystal set experimenting, the
available multiple ratio windings might be nice for trying impedance matching to headphones.
This was an AN/URM-34 signal generator - apparently factory new - kind of sad that it never saw use - but so it goes.
-Hue

27288. Re: Practical regen for on air use

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-21 23:46:48 UTC
From: rhulett1@...
Topic: 27270 Message: 27288

I built N5IB bayou jumper and operate it together with a two-fer 2W transmitter. Works quite well. Jim and I even had 2x
Paraset clone QSO.

73, Curt KB5JO

27289. Re: Practical regen for on air use

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-22 00:15:37 UTC
From: les.au49@...
Topic: 27270 Message: 27289

Hello Don,

This topic (use of regen for "on-air" use) is of great interest to me. Incidently "on-air" refers "use with a transmitter", not SW listening. Every time some-one reports, "I use my regen "on air" I take note. This is especially so when the transmitter is home-brew SSB.

I'm interested to read that you find the Armstrong circuit has "bad habits" compared with the Hartley. Would you care to share your experience? As for "drawbacks" in building a regen receiver - I think the main obstacle is access to (even a basic) metal-working shop (or experience with metal-working). In the 40's and 50's there were many mechanics shops and at school most boys learnt manual arts - code for metal and wood work. Alas - that's not the case today.

As for building Vlad's design - can anyone here comment on the performance of the Russian substitute (6J10P) for the 6AS6? Ditto for the 12AU6? The 12AU6 is a 7 pin RF pentode with G3 available. (This isn't the case with the 6AK5, for example). But the 12AU6 isn't listed as a "dual control" tube - just a regular RF pentode. At any rate, if these don't work (with some adjustment of bias) I can buy and substitute the 6AS6. The price of the 6AS6 is quite reasonable. Postage is expensive.

Les

27290. Paraset Project again

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-22 01:27:01 UTC
From: William Wood
Topic: 27290 Message: 27290
Attachments: 1 described; binary payloads are missing from this source WARC

Sorry Hurbert and others
I will try to send a picture.
It does look like the paraset sans
tubes…
Here’s a picture, and the kit has not
been kitted up yet, it is still in the works…
73 fer now
Bill KE9XQ

27291. Re: Paraset copy

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-22 01:34:33 UTC
From: les.au49@...
Topic: 27284 Message: 27291

Hello Hue,

Me-oh-my! I had the same problem!
Perhaps we both use Windows computers?
(I certainly do.)

Maybe that's why the link doesn't work!!

Les

27292. RE: [regenrx] Paraset Project again

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-22 02:37:48 UTC
From: Hubert Miller
Topic: 27290 Message: 27292
Attachments: 1 described; binary payloads are missing from this source WARC

Les - it has nothing to do with Windows. That's just how that group is set up - not open access.

I just minutes ago registered that this will be a kit. My immediate reaction was, YES!!!!!

I hope it, the kit, comes with some kind of 'nameplate' decal too.

-Hue

Sorry Hurbert and others
I will try to send a picture.
It does look like the paraset sans
tubes...
Here's a picture, and the kit has not
been kitted up yet, it is still in the works...
73 fer now
Bill KE9XQ

[cid:image001.jpg@01D22BD2.97CBD450]

27293. Re: [regenrx] Paraset Project again

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-22 02:44:52 UTC
From: Cecil Bayona
Topic: 27290 Message: 27293

On 10/21/2016 9:37 PM, Hubert Miller kargo_cult@... [regenrx] wrote:
>
>
> Les – it has nothing to do with Windows. That’s just how that group is
> set up – not open access.
>
> I just minutes ago registered that this will be a kit. My immediate
> reaction was, YES!!!!!
>
> I hope it, the kit, comes with some kind of ‘nameplate’ decal too.
>
> -Hue
>
> Sorry Hurbert and others
>
> I will try to send a picture.
>
> It does look like the paraset sans
>
> tubes…
>
> Here’s a picture, and the kit has not
>
> been kitted up yet, it is still in the works…
>
> 73 fer now
>
> Bill KE9XQ
>
>
>
>
> ---
> Posted by: Hubert Miller <Kargo_cult@...>
> ---

Nice looking kit, eagerly awaiting it's arrival.

--
Cecil - k5nwa
http://thepartsplace.k5nwa.com/

27294. Re: [regenrx] Re: Practical regen for on air use

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-22 06:53:18 UTC
From: Udo Peters
Topic: 27270 Message: 27294

Hi Les,

I used the Russian 6as6 equivalent as a replacement for the 6be6 mixer tubes in superhets. It can be used here without any changes in the socket. The only disadvantage may be a not so good isolation between input signal and oscillator. But so far I didn't notice any oscillator pulling, and it works perfectly well. I didn't try it in a regen though.

Best regards,

Udo, dk3bi

Am 22.10.2016 um 02:15 schrieb les.au49@... [regenrx]:
>
> Hello Don,
>
> This topic (use of regen for "on-air" use) is of great interest to
> me. Incidently "on-air" refers "use with a transmitter", not SW
> listening. Every time some-one reports, "I use my regen "on air" I
> take note. This is especially so when the transmitter is home-brew SSB.
>
> I'm interested to read that you find the Armstrong circuit has "bad
> habits" compared with the Hartley. Would you care to share your
> experience? As for "drawbacks" in building a regen receiver - I think
> the main obstacle is access to (even a basic) metal-working shop (or
> experience with metal-working). In the 40's and 50's there were many
> mechanics shops and at school most boys learnt manual arts - code for
> metal and wood work. Alas - that's not the case today.
>
> As for building Vlad's design - can anyone here comment on the
> performance of the Russian substitute (6J10P) for the 6AS6? Ditto for
> the 12AU6? The 12AU6 is a 7 pin RF pentode with G3 available.
> (This isn't the case with the 6AK5, for example). But the 12AU6 isn't
> listed as a "dual control" tube - just a regular RF pentode. At any
> rate, if these don't work (with some adjustment of bias) I can buy and
> substitute the 6AS6. The price of the 6AS6 is quite reasonable.
> Postage is expensive.
>
> Les
>
>

27295. Re: [regenrx] Re: Practical regen for on air use

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-22 07:39:21 UTC
From: les.au49@...
Topic: 27270 Message: 27295

Hello Udo,

Thank you for your answer. Can you say anything about the reliability of the Russian vs the US tube?

My guess: Both Russians and US know a LOT about military quality. I think I'll try a couple of Russian tubes (and if I have a problem I can merely replace the tube.) But a guess counts for zip. Experience counts for everything!

Thanks - Les

27296. Re: [regenrx] Re: Practical regen for on air use

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-22 07:48:44 UTC
From: Udo Peters
Topic: 27270 Message: 27296

Hi Les,
I have been using them for only 4 or 5 years. In this time I had no faults so far. So it's difficult to compare them to American tubes which last for decades ;-)
Best regards,
Udo, dk3bi

Am 22.10.2016 um 09:39 schrieb les.au49@... [regenrx]:
>
> Hello Udo,
>
> Thank you for your answer. Can you say anything about the
> reliability of the Russian vs the US tube?
>
> My guess: Both Russians and US know a LOT about military quality. I
> think I'll try a couple of Russian tubes (and if I have a problem I
> can merely replace the tube.) But a guess counts for zip. Experience
> counts for everything!
>
> Thanks - Les
>
>

27297. Re: [regenrx] Re: Practical regen for on air use

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-22 10:19:58 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27270 Message: 27297

Hola amigos ! What is the designation of the Russian almost equivalent
to the 6AS6 ?

Also , I am sue the Russian 6I1P is a clone of the ECH81 !!!

12AU7, 12AT7 and 12AX7 also have very close equivalents in Russian tubes

73 and DX
Arnie Coro
CO2KK
On 22/10/16 02:53, Udo Peters dk3bi@... [regenrx] wrote:
>
>
> Hi Les,
>
> I used the Russian 6as6 equivalent as a replacement for the 6be6 mixer
> tubes in superhets. It can be used here without any changes in the
> socket. The only disadvantage may be a not so good isolation between
> input signal and oscillator. But so far I didn't notice any oscillator
> pulling, and it works perfectly well. I didn't try it in a regen though.
>
> Best regards,
>
> Udo, dk3bi
>
>
>
> Am 22.10.2016 um 02:15 schrieb les.au49@... [regenrx]:
>>
>> Hello Don,
>>
>> This topic (use of regen for "on-air" use) is of great interest to
>> me. Incidently "on-air" refers "use with a transmitter", not SW
>> listening. Every time some-one reports, "I use my regen "on air" I
>> take note. This is especially so when the transmitter is home-brew
>> SSB.
>>
>> I'm interested to read that you find the Armstrong circuit has "bad
>> habits" compared with the Hartley. Would you care to share your
>> experience? As for "drawbacks" in building a regen receiver - I
>> think the main obstacle is access to (even a basic) metal-working
>> shop (or experience with metal-working). In the 40's and 50's there
>> were many mechanics shops and at school most boys learnt manual arts
>> - code for metal and wood work. Alas - that's not the case today.
>>
>> As for building Vlad's design - can anyone here comment on the

>> performance of the Russian substitute (6J10P) for the 6AS6? Ditto
>> for the 12AU6? The 12AU6 is a 7 pin RF pentode with G3 available.
>> (This isn't the case with the 6AK5, for example). But the 12AU6
>> isn't listed as a "dual control" tube - just a regular RF pentode.
>> At any rate, if these don't work (with some adjustment of bias) I can
>> buy and substitute the 6AS6. The price of the 6AS6 is quite
>> reasonable. Postage is expensive.
>>
>> Les
>>
>
>
>
>

27298. Re: 7.16 Resonator Regen Lives...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-22 11:02:22 UTC
From: dulmagedon@...
Topic: 27256 Message: 27298

Put my name on it Pete,
I have several cousins in your name sake town. Two (Keith and Carl) are electronic techs. I will Pm you shortly.
don

27299. Re: Practical regen for on air use

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-22 14:29:53 UTC
From: dulmagedon@...
Topic: 27270 Message: 27299

First I am a mech machinist (Automotive) by profession so I am supposed to have some of those skills however I much prefer wooden radios. I have a twinplex 6sl7 (now uses a 12sl7) and I have used it a lot for communication in my ham station. Usually when using my bare essentials one tube transmitter. I have also used it on AM with my DX60B. It copies SSb just fine as well. Bad habits? Touchy to hand capacity and and regen settings although once It is set up it is very serviceable. However during the course of my years playing with such things I have built a few hartley regens.Usually just whipped them up using the bsic circuit as a base. Some in pursuit of a usable transceiver design. I noticed right away they didn't seem prone to the same problems and I got to like them Currently I have two that I am very happy with. One uses a 56 tube and a 58 and is surprisingly stable. It is a very usable radio for Ham work. In fact I operated it in the Linc Cundall event this year with success. The other that still surprises me is the one I built when i was doing my take one tube transceiver in the Weskit style. I didn't like the weskit circuits so just did my own. Both (tx&rx)hartley based. That receiver stuns me with how well it works. I added a 6aq5 for extra audio but it was usable before and the circuit is so basic one would wonder why it works so well. I would not condem the Armstrong. In fact my slugabsorb is sort of Armstrong based but I just really like how the Hartley based circuits work. They also seem to have less of a telltale emission even when listening for CW or SSB. I rarely if ever have to fiddle with the regen pot when tuning a ham band. Both by the way are on 40M. The transceiver one uses a European tube. Tis an odd number with an extra letter in it prefix. Since I have not had to touch it since building it I have already forgotten the number but will check next time I am in the shack. EAC84 perhaps but let me check. That tube I chose because it is a dual triode with one half power and one half voltage style .I use the voltage side for the regen and the power side for the transmitter . The transmitter circuit and rx circuits are virtually identical except for grid leak values and the regen control. The rx runs though on reduced voltage.
Other then that all I can tell you is from the moment I put voltage to it I have been satisfied with it. I would like to get it on 80M as well and was working toward that end yesterday but am most careful not to upset it so any changes are instantly reverseable. I see parasets mentioned above I am also deep into spy radios . My favourite is the German Adapter set which I often have on 40M CW however since there is no regen involved I wont say much here.
donVe3LYX.

27300. Re: [regenrx] Re: Practical regen for on air use

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-22 15:24:50 UTC
From: Udo Peters
Topic: 27270 Message: 27300

Hi Arnie,

the Russian equivalent to the 6as6 tube I use here is:6Ж2П-ЕВ

I hope the cyrillic symbols come through.

Best regards,

Udo, dk3bi

Am 22.10.2016 um 12:19 schrieb 'Prof. Arnaldo Coro Antich' coro@...
[regenrx]:
>
> Hola amigos ! What is the designation of the Russian almost equivalent
> to the 6AS6 ?
>
> Also , I am sue the Russian 6I1P is a clone of the ECH81 !!!
>
> 12AU7, 12AT7 and 12AX7 also have very close equivalents in Russian tubes
>
> 73 and DX
> Arnie Coro
> CO2KK
> On 22/10/16 02:53, Udo Peters dk3bi@... [regenrx] wrote:
>>
>> Hi Les,
>>
>> I used the Russian 6as6 equivalent as a replacement for the 6be6
>> mixer tubes in superhets. It can be used here without any changes in
>> the socket. The only disadvantage may be a not so good isolation
>> between input signal and oscillator. But so far I didn't notice any
>> oscillator pulling, and it works perfectly well. I didn't try it in a
>> regen though.
>>
>> Best regards,
>>
>> Udo, dk3bi
>>
>>
>>
>> Am 22.10.2016 um 02:15 schrieb les.au49@... [regenrx]:
>>>
>>> Hello Don,
>>>
>>> This topic (use of regen for "on-air" use) is of great interest to
>>> me. Incidently "on-air" refers "use with a transmitter", not SW

>>> listening. Every time some-one reports, "I use my regen "on air"
>>> I take note. This is especially so when the transmitter is
>>> home-brew SSB.
>>>
>>> I'm interested to read that you find the Armstrong circuit has "bad
>>> habits" compared with the Hartley. Would you care to share your
>>> experience? As for "drawbacks" in building a regen receiver - I
>>> think the main obstacle is access to (even a basic) metal-working
>>> shop (or experience with metal-working). In the 40's and 50's
>>> there were many mechanics shops and at school most boys learnt
>>> manual arts - code for metal and wood work. Alas - that's not the
>>> case today.
>>>
>>> As for building Vlad's design - can anyone here comment on the
>>> performance of the Russian substitute (6J10P) for the 6AS6? Ditto
>>> for the 12AU6? The 12AU6 is a 7 pin RF pentode with G3 available.
>>> (This isn't the case with the 6AK5, for example). But the 12AU6
>>> isn't listed as a "dual control" tube - just a regular RF pentode.
>>> At any rate, if these don't work (with some adjustment of bias) I
>>> can buy and substitute the 6AS6. The price of the 6AS6 is quite
>>> reasonable. Postage is expensive.
>>>
>>> Les
>>>
>>
>
>

27301. Re: [regenrx] Re: Practical regen for on air use

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-22 16:09:33 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27270 Message: 27301

Thank you very much amigo Udo from Germany

I wonder if the last two letters after the dash EB are important...
because I see 6ZHE2P, that is 6Ж2П tubes here locally , but without the
EB at the end.

By the way , the 6ZHE1P are identical to the 6AK5 and 5654 tubes. The
fact is that the cyrillic letter Ж is transliterated to zhe in the
latin alphabet.

In a typical well built the performance of Hartley circuit using screen
grid regeneration control with the 6ZHE1P/6AK5 is a good as you may want
a regenerative detector to work, especially between 500 kHz and 5
megaHertz tuning range. In my REGENERODYNES... the Hartley detector
tunes from 2.0 to 3.5 megaHertz, and the bandspread function tunes from
2.0 to 2.3 or 2.0 to 2.5 megaHertz for very smooth easy tuning...

73 and DX
Arnie Coro

CO2KK

b

On 22/10/16 11:24, Udo Peters dk3bi@... [regenrx] wrote:
>
>
> Hi Arnie,
>
> the Russian equivalent to the 6as6 tube I use here is:6Ж2П-EB
>
> I hope the cyrillic symbols come through.
>
> Best regards,
>
> Udo, dk3bi
>
>
>
> Am 22.10.2016 um 12:19 schrieb 'Prof. Arnaldo Coro Antich'
> coro@... [regenrx]:
>>
>> Hola amigos ! What is the designation of the Russian almost
>> equivalent to the 6AS6 ?
>>
>> Also , I am sue the Russian 6I1P is a clone of the ECH81 !!!

>>
>> 12AU7, 12AT7 and 12AX7 also have very close equivalents in Russian tubes
>>
>> 73 and DX
>> Arnie Coro
>> CO2KK
>> On 22/10/16 02:53, Udo Peters dk3bi@... [regenrx] wrote:
>>>
>>> Hi Les,
>>>
>>> I used the Russian 6as6 equivalent as a replacement for the 6be6
>>> mixer tubes in superhets. It can be used here without any changes in
>>> the socket. The only disadvantage may be a not so good isolation
>>> between input signal and oscillator. But so far I didn't notice any
>>> oscillator pulling, and it works perfectly well. I didn't try it in
>>> a regen though.
>>>
>>> Best regards,
>>>
>>> Udo, dk3bi
>>>
>>>
>>>
>>> Am 22.10.2016 um 02:15 schrieb les.au49@... [regenrx]:
>>>>
>>>> Hello Don,
>>>>
>>>> This topic (use of regen for "on-air" use) is of great interest to
>>>> me. Incidently "on-air" refers "use with a transmitter", not SW
>>>> listening. Every time some-one reports, "I use my regen "on air"
>>>> I take note. This is especially so when the transmitter is
>>>> home-brew SSB.
>>>>
>>>> I'm interested to read that you find the Armstrong circuit has "bad
>>>> habits" compared with the Hartley. Would you care to share your
>>>> experience? As for "drawbacks" in building a regen receiver - I
>>>> think the main obstacle is access to (even a basic) metal-working
>>>> shop (or experience with metal-working). In the 40's and 50's
>>>> there were many mechanics shops and at school most boys learnt
>>>> manual arts - code for metal and wood work. Alas - that's not the
>>>> case today.
>>>>
>>>> As for building Vlad's design - can anyone here comment on the
>>>> performance of the Russian substitute (6J10P) for the 6AS6? Ditto
>>>> for the 12AU6? The 12AU6 is a 7 pin RF pentode with G3
>>>> available. (This isn't the case with the 6AK5, for example). But
>>>> the 12AU6 isn't listed as a "dual control" tube - just a regular RF
>>>> pentode. At any rate, if these don't work (with some adjustment of
>>>> bias) I can buy and substitute the 6AS6. The price of the 6AS6 is

>>>> quite reasonable. Postage is expensive.
>>>>
>>>> Les
>>>>
>>>
>>
>
>
>
>

27302. Re: Practical regen for on air use

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-22 16:15:41 UTC
From: dulmagedon@...
Topic: 27270 Message: 27302

ECC832. Just spent a half hour with it and am still smiling.
donVE3LYX

27303. RE: [regenrx] Re: Practical regen for on air use

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-22 18:52:12 UTC
From: Hubert Miller
Topic: 27270 Message: 27303

Don – the single tube trans-receiver: how much power into the transmitter section?
Do you notice at all, any receiver drift due to heating of the transmitter triode in the same glass?
I’m just wondering. The Weskit only ran 2 watts max, i think, and probably less than that at
practical battery B+ voltage.
thanks-
Hue

27304. RE: [regenrx] Re: Practical regen for on air use

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-22 20:21:43 UTC
From: dulmagedon@...
Topic: 27270 Message: 27304
Attachments: 1 described; binary payloads are missing from this source WARC

Not that I have noticed Hue, so I can only say it has not yet been an issue. I am still at the enjoyment stage so haven't got down and dirty checking it. The only similarity to the Weskit is the single dual triode. It is my own circuit. When I put it on the air Paul N1BUG came back almost immediately. That is quite a haul for the little rig.
I think well over 400 mi ATCF. I made the rx section with one less plate in its cap and added a small bandspread cap to even the score and so I can move a bit looking for replies. It is single tuned (dual gang variable cap). To be honest I don't know why it works so well. I am a bit surprised. It is pure joy to run. So much so I am afraid to monkey with it much.
donVE3LYX

27306. RE: [regenrx] Re: Practical regen for on air use [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-22 23:27:00 UTC
From: dulmagedon@...
Topic: 27270 Message: 27306

I dont think I have drawn one yet. Just a normal hartley osc. Coil centre tapped to cathode. TX and RX share the same RFC . B plus is switched to decide which side is being used. 6aq5 amp is nothing special. Runs about 1/2 throttle.
donVE3LYX

27307. mcMurdo-Silver 801 Final report

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-22 23:56:07 UTC
From: Richard
Topic: 27307 Message: 27307

Firstly, there is serious interaction between Antenna Tuning and Main Tuning, probably because of magnetic coupling between the coils. They are 1.5 inches apart with a small shield and the shielded 6BA6 RF tube between them. There is no remedy there.

I remembered Don Mix in "The Novice Special," QST June 1956, notes that high gain RF pentodes have a small dynamic range, little output, and are difficult to control, so I substituted a 6AK6 for the 6AU6 with beneficial results, greater dynamic range and much more output.

The set was pulling 40 ma at 180 volts which seemed excessive, so I measured the tube currents.

6BA6 RF amp. 23 ma. 6AK6 detector 1 ma. 6C4 1'st AF 1.2 ma. 6AK6 AF output 15 ma.

The 6BA6 RF stage has a design flaw putting 180 volts on the screen, which should be about 100 volts. I added a 27k dropping resistor and screen bypass.

Backlash in tuning: The tuning capacitors are MPC types with extended shafts, and have significant friction. I played with penetrating fluid and oil, with insignificant results, and think they were meant to have friction as they were primarily screwdriver set capacitors. The tuning drive has spring loaded backlash gears, but the capacitor friction causes inevitable lost motion.

It works best with an external (larger) speaker as the built in 2.5 or 3 inch speaker is less efficient. Changing the 6C4 to a dual triode for another AF stage would give better audio.

Conclusion: It works tolerably well from 90 to 180 volts, but is nothing to get excited about. I've learned a lot, but it's time to move on. McMurdo-Silver must have been in chaos when this was put out, a badly designed barely-working receiver.

Richard, AA1P

27308. RE: [regenrx] mcMurdo-Silver 801 Final report

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-23 00:38:28 UTC
From: Hubert Miller
Topic: 27307 Message: 27308

Thanks, Richard, for the 801 review. It always astonishes me when i learn about some design flaw in a product,
particularly so for apparently pretty obvious items (such as the screen resistor here.)

I have not read a lot about McMurdo Silver's electronics enterprises – i suppose i should, to fill in the blanks.
But he certainly tried a lot of different things and to me, at least, seems never to have really found big success,
whether aiming at the top, middle, or bottom of the market.
I had a couple of their VOMAX vtms at one time – i wish i still had them – i gave up too easily, and didn't
realize the schematic was even published in a QST article during the 'war years'.

I have somewhere (i think) the chassis of their VHF 800-series receiver. Has kind of homemade-looking tuning
capacitor.
-Hue _._,___

27309. Re: [regenrx] mcMurdo-Silver 801 Final report

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-23 09:49:33 UTC
From: Richard
Topic: 27307 Message: 27309

Yes, I had hoped it would be my main receiver. I really like its looks
and layout, so I'm thinking strip it bare and use it as a foundation.
I'm sure I can do better.

Richard, AA1P

On 10/22/2016 08:38 PM, Hubert Miller kargo_cult@... [regenrx] wrote:
>
> Thanks, Richard, for the 801 review. It always astonishes me when i
> learn about some design flaw in a product,
>
> particularly so for apparently pretty obvious items (such as the
> screen resistor here.)
>
> I have not read a lot about McMurdo Silver’s electronics enterprises –
> i suppose i should, to fill in the blanks.
> But he certainly tried a lot of different things and to me, at least,
> seems never to have really found big success,
>
> whether aiming at the top, middle, or bottom of the market.
>
> I had a couple of their VOMAX vtms at one time – i wish i still had
> them – i gave up too easily, and didn’t
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> realize the schematic was even published in a QST article during the
> ‘war years’.
>
> I have somewhere (i think) the chassis of their VHF 800-series
> receiver. Has kind of homemade-looking tuning
>
> capacitor.
>
> -Hue _._,___
>
>

27310. RE: [regenrx] Re: Practical regen for on air use [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-23 12:46:28 UTC
From: dulmagedon@...
Topic: 27270 Message: 27310

The other thing I notice about hartley based regens is they are not over sensitive to antennas like the others. You can use your transmitting antenna with them. You can see in the photo the switch. It switches the B+ from the RFC to TX or Rx but also switches the Antenna from the Tx to RX side (DPDT) my armstrongs don't like or need that much antenna which is fine but when operating a transceiver it is nice to only need one antenna.
This rig seems to suit me well.
donVe3LYX

27315. RE: [regenrx] mcMurdo-Silver 801 Final report

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-23 17:30:44 UTC
From: Hubert Miller
Topic: 27307 Message: 27315

It’s tempting, but there are other chassis and parts around, and you’ll regret it. There are so few of these existing – to say the least.
-Hue

>Yes, I had hoped it would be my main receiver. I really like its looks and layout, so I'm thinking strip it bare and use it as a foundation. I'm sure I can do better.

Richard, AA1P

27317. Re: [regenrx] Two meter transceiver---6N4---correction

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-23 18:23:22 UTC
From: Michael
Topic: 27311 Message: 27317

¡Viva nostalgia!

Especially worth reading is the article on
"Lithium, the Hungry Metal", p161ff.

Michael

On 23.10.16 19:13, 'Brian Burns' brian@... [regenrx]
wrote:
...
> This link will give you a .pdf of the whole Pop Mechanics June 1946
> issue to save in .pdf format:
>
> https://ia601306.us.archive.org/30/items/PopularMechanics1946/Popular_Mechanics_06_1946.pdf
...
> The whole issue of the magazine is really interesting as an historical
> document. The post WWII era was a vastly different place from today’s
> world. The level and number of the DIY projects was quite remarkable,
> and by the ads it seems that every man in America smoked a pipe!

27318. Re: mcMurdo-Silver 801 Final report

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-24 10:57:53 UTC
From: david.newkirk@...
Topic: 27307 Message: 27318

Richard wrote:

> McMurdo-Silver must have been in chaos when this was put out, a
badly designed barely-working receiver.

Writeups (search by your favorite means) report that McMurdo Silver had suffered significant financial reversals by 1940, and took his own life in 1947. So the postwar years for him were not a time of sunny innovation.

Best regards,

Dave
amateur radio W9BRD

27319. Re: 7.16 Resonator Regen Lives...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-24 11:17:49 UTC
From: dulmagedon@...
Topic: 27256 Message: 27319

Tried to find your email. Got the first half to @ but don't know the last chunk (yahoo.com or gmail.com etc)
Then I see we are only 40miles apart . Anyway what should I send you to cover the costs?
don

27320. Regenodyne Tuning

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-24 22:12:25 UTC
From: Leonard Meek
Topic: 27320 Message: 27320

Stop me if you've heard this before. Tuning a regenodyne receiver can be challanging, especially with only logging scales to go by. I first find the tuning range of each RF coil I'm going to use. A good RF sig gen and/or freq counter are used, with the peak response shown on an "O" scope or VTVM. The min and max freqs are tabulated on an Excel spreadsheet. Then I measure the freq of the regen detector at each major point on the log dial, and tabulate the readings on the spreadsheet. Finally, I set Excel to calculate the IF freq for any freq I want to tune to, with whatever xtal I have in my measly collection, by subtracting the xtal freq from the desired RF freq; =ABS(RF-Xtal) Checking this against the IF tuning list gives me a starting point to set the detector at. The RF coil that covers the freq I want can then be swept. This reduces the searching by luck for me.

Leonard

27321. Re: [regenrx] Regenodyne Tuning

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-24 22:36:13 UTC
From: Michael
Topic: 27320 Message: 27321

Eureka! And there was I dumbo reading the display of
a zero-beating external VFO. I always had a niggling
feeling that there must be a simpler way...

Long live KISS!

Michael

On 24.10.16 23:12, 'Leonard Meek' wrote:
Stop me if you've heard this before. Tuning a regenodyne receiver can be
challanging, especially with only logging scales to go by. I first find the
tuning range of each RF coil I'm going to use. A good RF sig gen and/or
freq
counter are used, with the peak response shown on an "O" scope or VTVM. The
min and max freqs are tabulated on an Excel spreadsheet. Then I measure the
freq of the regen detector at each major point on the log dial, and
tabulate
the readings on the spreadsheet. Finally, I set Excel to calculate the IF
freq for any freq I want to tune to, with whatever xtal I have in my measly
collection, by subtracting the xtal freq from the desired RF freq;
=ABS(RF-Xtal) Checking this against the IF tuning list gives me a starting
point to set the detector at. The RF coil that covers the freq I want can
then be swept. This reduces the searching by luck for me.

27322. Re: [regenrx] Regenodyne Tuning

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-25 00:53:06 UTC
From: dulmagedon@...
Topic: 27320 Message: 27322

If you include in the tuning range the ability to tune CHU and WWV you have a superb reference point.

27323. Re: [regenrx] Regenodyne Tuning

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-25 01:27:32 UTC
From: Bill Cromwell
Topic: 27320 Message: 27323

Hi Leonard,

For my RAK-7 and SW-3 I asked the spread sheet to make a smooth curve of dial/frequency for those logging scales with a small handful of points. I don't have to fuss with the computer - just look at a sheet of paper. That also works for an LM without the tuning book. It only takes a few seconds to determine the frequency of a 'found' signal or to preset the radio to a wanted frequency (W1AW?). Both radios will reset very closely to a previously logged signal.

There is no essential difference between a dial marked 0 to 100 and one marked 3.5 to 4.0. It's only a matter of what you are used to.

73,

Bill KU8H

On 10/24/2016 06:12 PM, 'Leonard Meek' lemeek@... [regenrx] wrote:
> Stop me if you've heard this before. Tuning a regenodyne receiver can be
> challanging, especially with only logging scales to go by. I first find the
> tuning range of each RF coil I'm going to use. A good RF sig gen and/or freq
> counter are used, with the peak response shown on an "O" scope or VTVM. The
> min and max freqs are tabulated on an Excel spreadsheet. Then I measure the
> freq of the regen detector at each major point on the log dial, and tabulate
> the readings on the spreadsheet. Finally, I set Excel to calculate the IF
> freq for any freq I want to tune to, with whatever xtal I have in my measly
> collection, by subtracting the xtal freq from the desired RF freq;
> =ABS(RF-Xtal) Checking this against the IF tuning list gives me a starting
> point to set the detector at. The RF coil that covers the freq I want can
> then be swept. This reduces the searching by luck for me.
>
> Leonard
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> "In the interest of Regenerating radio's lost art of Regeneration"
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> Yahoo Groups Links
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bark less - wag more

27324. Re: [regenrx] Regenodyne Tuning

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-25 01:41:33 UTC
From: Leonard Meek
Topic: 27320 Message: 27324

I record the dial settings for them so I know when I'm in the ballpark.

Leonard

----- Original Message -----
From: dulmagedon@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Monday, October 24, 2016 2:53 PM
Subject: Re: [regenrx] Regenodyne Tuning

If you include in the tuning range the ability to tune CHU and WWV you have a superb reference point.

27325. Re: [regenrx] Regenodyne Tuning

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-25 01:45:21 UTC
From: Leonard Meek
Topic: 27320 Message: 27325

Haven't had much luck setting up curves with Excel lately. I used to do it
for the machinery where I used to work. Maybe I'll try it again.

Leonard

----- Original Message -----
From: "Bill Cromwell wrcromwell@... [regenrx]"
<regenrx@yahoogroups.com>
To: <regenrx@yahoogroups.com>
Sent: Monday, October 24, 2016 3:27 PM
Subject: Re: [regenrx] Regenodyne Tuning

> Hi Leonard,
>
> For my RAK-7 and SW-3 I asked the spread sheet to make a smooth curve of
> dial/frequency for those logging scales with a small handful of points.
> I don't have to fuss with the computer - just look at a sheet of paper.
> That also works for an LM without the tuning book. It only takes a few
> seconds to determine the frequency of a 'found' signal or to preset the
> radio to a wanted frequency (W1AW?). Both radios will reset very closely
> to a previously logged signal.
>
> There is no essential difference between a dial marked 0 to 100 and one
> marked 3.5 to 4.0. It's only a matter of what you are used to.
>
> 73,
>
> Bill KU8H
>
> On 10/24/2016 06:12 PM, 'Leonard Meek' lemeek@... [regenrx]
> wrote:
>> Stop me if you've heard this before. Tuning a regenodyne receiver can be
>> challanging, especially with only logging scales to go by. I first find
>> the
>> tuning range of each RF coil I'm going to use. A good RF sig gen and/or
>> freq
>> counter are used, with the peak response shown on an "O" scope or VTVM.
>> The
>> min and max freqs are tabulated on an Excel spreadsheet. Then I measure
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>> freq of the regen detector at each major point on the log dial, and
>> tabulate
>> the readings on the spreadsheet. Finally, I set Excel to calculate the IF
>> freq for any freq I want to tune to, with whatever xtal I have in my
>> measly
>> collection, by subtracting the xtal freq from the desired RF freq;

>> =ABS(RF-Xtal) Checking this against the IF tuning list gives me a
>> starting
>> point to set the detector at. The RF coil that covers the freq I want can
>> then be swept. This reduces the searching by luck for me.
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>> Leonard
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>> "In the interest of Regenerating radio's lost art of Regeneration"
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27326. Another unusual post-oscillator detector circuit

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-25 22:53:31 UTC
From: Hubert Miller
Topic: 27326 Message: 27326

I was looking online for a review of the Heathkit Tunnel [diode] Dipper HM-10 to kind of learn what to expect if i decide to repair the one i have.
I read this write-up on the Heathkit dip meters at
http://www.w6ze.org/Heathkit/Heathkit_007_HD1250.pdf
on page 3 of 3 there's the schematic for the Heathkit HD-1250 schematic. A bipolar transistor is used as the adjustable dip oscillator
and the detector consists of a DG MOSFET followed by 2 diodes in a fullwave rectifier. One diode takes RF from the source and one from
the drain; one gate is driven and the other, as usual, is + biased. I actually see no advantage in this circuit, except that potentially the use
of a MOSFET minimizes loading on the tuned circuit, but in this example, the gate-ground resistor is not optimized for minimum load at
HF frequencies. (Probably couldn't practically raise it in this instrument because of parallel gate-ground capacitance's effect at VHF.)
Anyway i thought this circuit quite unusual. Maybe i'll even look up the manual and see if it talks about it in more detail.
-H

27327. Re: Another unusual post-oscillator detector circuit

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-26 10:51:13 UTC
From: dawmast@...
Topic: 27326 Message: 27327

By connecting an aerial to the dipmeter coil and by adjusting the Sens. potmeter R1 you can use your dipmeter as a regenerative receiver.

27328. Re: Another unusual post-oscillator detector circuit

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-26 11:53:21 UTC
From: david.newkirk@...
Topic: 27326 Message: 27328

Hue wrote:

> a DG MOSFET followed by 2 diodes in a fullwave rectifier. One diode takes RF from the source and one from
the drain; one gate is driven and the other, as usual, is + biased.

Another aspect of that circuit deserves comment: The detector-driving MOSFET is equipped with equal-value drain and source resistors with the aim of developing equal, antiphase drive for the detector diodes, but this approach cannot work as intended because it ignores device physics and the fundamental differences between common-cathode/source/emitter and common plate/drain/collector amplifiers.

To put the "device physics" aspect simplistically, the drain resistor is shunted by the device's drain-to-source impedance (for a small-signal MOSFET, a value on the order of kilohms) more or less in series to common with the source resistor) and the source resistor is shunted by the device's source impedance (a value in the tens to hundreds of ohms). So the circuit's two diodes, one driven from the MOSFET drain and the other from its source, aren't driven from anything like the same impedance.

Even worse for hopes of achieving equal drive levels for both diodes, the MOSFET acts as a common-source amplifier in driving the drain diode and a common-drain amplifier--a cathode/source/emitter follower--for driving the source diode. Assuming nonzero impedances to common in both legs of the circuit, the gate-to-drain path affords some voltage gain, and the gate-to-source path affords some voltage _loss_. Driving both diodes from the same amplifier port -- preferably the drain, which path provides voltage gain -- via a trifilar transformer connected to drive the diodes in push-pull would have been a better solution.

A multiple-crystal filter I long wanted to try (and ultimately _did_ try) at 1843 kHz (Hugh L. Gottfried, W6YBR, "An Inexpensive Crystal-Filter I.F. Amplifier," February 1958 QST, page 18, ported from 1690 kHz to 455 kHz in Chet B. Opal, K3CUW, "Simple Crystal Filter," March 1964 QST, page 64) also embodies this "equal cathode and plate resistors equals equal but opposite output" misunderstanding. Author Gottfried's finding -- that the value of his filter's "phasing" capacitances was "not critical" -- is directly contrary to the behavior of the phasing capacitance in a classical, well-balanced single-crystal-gate filter, and serves as direct evidence that he did indeed not achieve the equal but opposite drive he sought. But not to worry: What he *did* successfully build at 1690 kHz is a buffered version of what we today commonly employ -- with careful attention paid to intercrystal, coupling-controlling capacitances to common, because buffer amplifiers are usually not employed between its multiple crystals -- as a ladder filter!

Best regards,

Dave
amateur radio W9BRD

27329. Re: Another unusual post-oscillator detector circuit

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-26 14:35:13 UTC
From: dulmagedon@...
Topic: 27326 Message: 27329

Now ur talking! This is the whole secret. in practical form. OSC , controlable voltage and antenna and earphone.
donVE3LYX

27330. RE: [regenrx] Re: Another unusual post-oscillator detector circuit

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-26 18:12:39 UTC
From: Hubert Miller
Topic: 27326 Message: 27330

I would return the gate resistor R23, 100k, directly to the source. That would end the situation with the source-follower output, and not greatly
upset the bias since the source is at +1 volts. Gate2 can be adjusted for to compensate if necessary. The source and drain resistors are low value, 350
ohms, which is very low compared to the drain impedance of 100-200k. That will tend to give equal outputs over a large part of the very large frequency
range the buffer will work at. Buffer output will start to fall off at around 100 MHz anyway, where the device and stray capacitance start approaching the
impedance of the 350 ohm resistors. Due to the wide frequency range 1.6 – 250 MHz (7 octaves?), transformer coupling i think is a very challenging
proposition. This circuit is not automatically to be filed as ‘cannot work’ as it’s well established in a variety of circuits from AF to RF and in commercial
equipment too, not just the HD-1250. Even as-is, if the output at the drain becomes very low, the source-follower output is less affected by device
capacitance and its output gain will tend to stay constant at some level <1 so the buffer achieves its purpose. Being driven by the oscillator its input RF
voltage is in the volts, not at receiver level, so even falling back to the <1 gain at VHF, there is still output to drive the indicating meter.
I bought the manual for the HD-1250 so i’ll soon see if Heathkit provided any pertinent comments in their circuit description. I don’t see any
immediate advantage to using a fullwave rectifier here so i am wondering if there’s more to this than meets the eye.
-Hue

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Wednesday, October 26, 2016 4:53 AM
To: regenrx@yahoogroups.com
Subject: [regenrx] Re: Another unusual post-oscillator detector circuit

Hue wrote:

> a DG MOSFET followed by 2 diodes in a fullwave rectifier. One diode takes RF from the source and one from

the drain; one gate is driven and the other, as usual, is + biased.

Another aspect of that circuit deserves comment: The detector-driving MOSFET is equipped with equal-value drain and source resistors with the aim of developing equal, antiphase drive for the detector diodes, but this approach cannot work as intended because it ignores device physics and the fundamental differences between common-cathode/source/emitter and common plate/drain/collector amplifiers.

To put the "device physics" aspect simplistically, the drain resistor is shunted by the device's drain-to-source impedance (for a small-signal MOSFET, a value on the order of kilohms) more or less in series to common with the source resistor) and the source resistor is shunted by the device's source impedance (a value in the tens to hundreds of ohms). So

the circuit's two diodes, one driven from the MOSFET drain and the other from its source, aren't driven from anything like the same impedance.

Even worse for hopes of achieving equal drive levels for both diodes, the MOSFET acts as a common-source amplifier in driving the drain diode and a common-drain amplifier--a cathode/source/emitter follower--for driving the source diode. Assuming nonzero impedances to common in both legs of the circuit, the gate-to-drain path affords some voltage gain, and the gate-to-source path affords some voltage _loss_. Driving both diodes from the same amplifier port -- preferably the drain, which path provides voltage gain -- via a trifilar transformer connected to drive the diodes in push-pull would have been a better solution.

A multiple-crystal filter I long wanted to try (and ultimately _did_ try) at 1843 kHz (Hugh L. Gottfried, W6YBR, "An Inexpensive Crystal-Filter I.F. Amplifier," February 1958 QST, page 18, ported from 1690 kHz to 455 kHz in Chet B. Opal, K3CUW, "Simple Crystal Filter," March 1964 QST, page 64) also embodies this "equal cathode and plate resistors equals equal but opposite output" misunderstanding. Author Gottfried's finding -- that the value of his filter's "phasing" capacitances was "not critical" -- is directly contrary to the behavior of the phasing capacitance in a classical, well-balanced single-crystal-gate filter, and serves as direct evidence that he did indeed not achieve the equal but opposite drive he sought. But not to worry: What he *did* successfully build at 1690 kHz is a buffered version of what we today commonly employ -- with careful attention paid to intercrystal, coupling-controlling capacitances to common, because buffer amplifiers are usually not employed between its multiple crystals -- as a ladder filter!

Best regards,

Dave

amateur radio W9BRD

27331. OT: compression-variable inductor ?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-26 20:08:48 UTC
From: Hubert Miller
Topic: 27331 Message: 27331

I am fishing for ideas for a variable inductance coil, where the inductance varies by stretching or squeezing
together the coil, AND is not mechanically very complicated. I'm presently stumped and have no starting
point ideas.
The coil is for a simple VHF receiver where i want the tuned circuit impedance as high as possible. I'd like
to use only self capacitance of the coil, no separate variable capacitor.
I think this would require something like an externally threaded plastic tube maybe 1.5 - 2.5 inches long
and some kind of large nut or coupling to ride the threads and work the compression or stretching.
I'm thinking about 12 gauge wire for the coil.
If you wonder, this is for an FM-band crystal radio.
No - i don't want to machine a tuned cavity, thanks! And resonant lines, too long.
thanks for any input-
Hue

27332. Re: [Glowbugs] OT: compression-variable inductor ?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-26 22:12:33 UTC
From: John Marshall
Topic: 27331 Message: 27332

Hue,

How about a string and pulley drive? I'm imagining something similar to a helical filter with the coil anchored to the chassis at one end and connected to the string and the free end. The string would probably have to be a closed loop so that it can pull in both directions. With nothing but a low-loss string, perhaps monofilament, connected to it, impedance at the top could be very high and so could the Q.

John, KU4AF
Pittsboro, NC

On Oct 26, 2016, at 4:08 PM, Hubert Miller wrote:

> I am fishing for ideas for a variable inductance coil, where the inductance varies by stretching or squeezing
> together the coil, AND is not mechanically very complicated. I’m presently stumped and have no starting
> point ideas.
> The coil is for a simple VHF receiver where i want the tuned circuit impedance as high as possible. I’d like
> to use only self capacitance of the coil, no separate variable capacitor.
> I think this would require something like an externally threaded plastic tube maybe 1.5 – 2.5 inches long
> and some kind of large nut or coupling to ride the threads and work the compression or stretching.
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> If you wonder, this is for an FM-band crystal radio.
> No – i don’t want to machine a tuned cavity, thanks! And resonant lines, too long.
> thanks for any input-
> Hue

27333. Re: [regenrx] OT: compression-variable inductor ?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-26 23:15:42 UTC
From: Rob
Topic: 27331 Message: 27333

Got a SLINKY?

I bought solar panel ribbon wire to play with this idea:
http://www.learnmorsecode.com/regen3/ribbon1.jpg

On 10/26/2016 04:08 PM, Hubert Miller kargo_cult@... [regenrx] wrote:
>
> I am fishing for ideas for a variable inductance coil, where the
> inductance varies by stretching or squeezing
>
> together the coil, AND is not mechanically very complicated. I?m
> presently stumped and have no starting
>
> point ideas.
>
> The coil is for a simple VHF receiver where i want the tuned circuit
> impedance as high as possible. I?d like
>
> to use only self capacitance of the coil, no separate variable capacitor.
>
> I think this would require something like an externally threaded
> plastic tube maybe 1.5 ? 2.5 inches long
>
> and some kind of large nut or coupling to ride the threads and work
> the compression or stretching.
>
> I?m thinking about 12 gauge wire for the coil.
>
> If you wonder, this is for an FM-band crystal radio.
> No ? i don?t want to machine a tuned cavity, thanks! And resonant
> lines, too long.
>
> thanks for any input-
>
> Hue
>
>

27334. Re: OT: compression-variable inductor ?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-27 00:33:07 UTC
From: dulmagedon@...
Topic: 27331 Message: 27334

1940 Radio handbook (Not ARRL) there is a compression coil tuned RF power amp and it tell how.
donVe3LYX

27335. Re: [regenrx] Re: OT: compression-variable inductor ?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-27 00:44:03 UTC
From: Richard
Topic: 27331 Message: 27335

you can also use a rotating shorted turn inside the coil to vary inductance.

Richard, AA1P

On 10/26/2016 08:33 PM, dulmagedon@... [regenrx] wrote:
>
> 1940 Radio handbook (Not ARRL) there is a compression coil tuned RF
> power amp and it tell how.
> donVe3LYX
>
>

27336. Re: [regenrx] Re: OT: compression-variable inductor ?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-27 03:39:37 UTC
From: Rob
Topic: 27331 Message: 27336

Can you post pictures of the pages?
or point to where to down load the 1940 radio handbook?

On 10/26/2016 08:33 PM, dulmagedon@... [regenrx] wrote:
>
> 1940 Radio handbook (Not ARRL) there is a compression coil tuned RF
> power amp and it tell how.
> donVe3LYX
>
>

27337. Re: [regenrx] Re: OT: compression-variable inductor ?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-27 03:49:01 UTC
From: Rob
Topic: 27331 Message: 27337

I found a Radio Hand Book seventh edition 1940 its 603 pages.
WHAT PAGE is it on?

On 10/26/2016 08:33 PM, dulmagedon@... [regenrx] wrote:
>
> 1940 Radio handbook (Not ARRL) there is a compression coil tuned RF
> power amp and it tell how.
> donVe3LYX
>
>

27338. Re: [regenrx] OT: compression-variable inductor ?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-27 04:24:05 UTC
From: Leonard Meek
Topic: 27331 Message: 27338

How about a stationary coil with a moveable powdered iron core? I used this in my Mk.12 regen with some success.

Leonard

----- Original Message -----
From: Hubert Miller kargo_cult@... [regenrx]
To: regenrx@yahoogroups.com ; Glowbugs
Sent: Wednesday, October 26, 2016 10:08 AM
Subject: [regenrx] OT: compression-variable inductor ?

I am fishing for ideas for a variable inductance coil, where the inductance varies by stretching or squeezing

together the coil, AND is not mechanically very complicated. I'm presently stumped and have no starting

point ideas.

The coil is for a simple VHF receiver where i want the tuned circuit impedance as high as possible. I'd like

to use only self capacitance of the coil, no separate variable capacitor.

I think this would require something like an externally threaded plastic tube maybe 1.5 - 2.5 inches long

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I'm thinking about 12 gauge wire for the coil.

If you wonder, this is for an FM-band crystal radio.
No - i don't want to machine a tuned cavity, thanks! And resonant lines, too long.

thanks for any input-

Hue

27339. RE: OT: compression-variable inductor ?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-27 05:45:04 UTC
From: Hubert Miller
Topic: 27331 Message: 27339

I thought about this some more. I need some kind of sliding contact device. The stretchy coil idea isn't best for Q.
When i want less inductance, i should use less wire, since the ohmic resistance otherwise stays the same and the
Q decreases. A few paragraphs in QST i quoted previously demonstrated that shorted turns had little actual
effect on Q.
I recall taking apart some old UHF TV converter that had a circular tuned line with a shorting slider. Maybe if i
can recall some more details of that thing, it will inspire me. ___
I DO have a Q meter that covers the 100 MHz territory but it needs some work....anyway this will be an opportunity to
also use my dipmeters, which i haven't done for a while.
thanks for the suggestions, tho !
-Hue

27340. RE: [regenrx] OT: compression-variable inductor ?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-27 06:27:19 UTC
From: Hubert Miller
Topic: 27331 Message: 27340

Yes, you're right - the stretchy coil idea is a hard way to do what you did for a variable inductor.
And since the frequency range of the band i'm interested in is only 1.25 : 1 the Q will not change
that substantially between the frequencies for the same length of wire used. I forgot that. The
shorted turn might do it also and even the variometer idea might be pretty easy for this low an
inductance, 0.03 uH.
thanks for reminding me!

>How about a stationary coil with a moveable powdered iron core? I used this in my Mk.12 regen with some success.
Leonard

27341. Re: [regenrx] RE: OT: compression-variable inductor (and VHF regen receiver) ?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-27 07:01:08 UTC
From: Jim Wiley
Topic: 27331 Message: 27341

I think what you saw may have been a Mallory "Induc-tuner" (I think I have the name right), popular in the late 40's and early 50's. Probably hard to find info on the gadget now, but it was used in fairly wide range VHF tuning units, as an alternative to rotating "turret type" tuners. Some vintage VHF communications receivers (Nems-Clarke) used this system. They were used in USAF tracking stations, such as the one at Vandenberg AFB (the Pacific Missile Range) in California, and tuned roughly 50 to 275 MHz. I worked there in the 60's and 70's. If you find someone with a fairly comprehensive junk box they may have one.

You may be able to find pictures on Wikipedia or some similar place.

I do have to ask why you are attempting to build a VHF FM crystal set. You do realize that FM does not detect properly with a standard diode detector. Yes, a method called "slope detection" can be used, but to do so requires significantly more selectivity that the "Q" of a straight diode detector offers. A simple super-regen will work reasonably well. Such a design appeared in Popular Electronics magazine in 1964 (don't remember which month, could have been April. Wow - that was going on 60 years ago!) Regeneration serves to significantly boost the "Q" of a tuned circuit, of course.

Used a single 6C4, which I built and was surprised how well it did. This was in the days when the FM BC band was significantly less populated than it is today. Not too sure how it would do today, but I do encourage you to try it. A transistor version would be fun too.

- Jim, KL7CC

On 10/26/2016 9:45 PM, Hubert Miller kargo_cult@... [regenrx] wrote:
>
> I thought about this some more. I need some kind of sliding contact
> device. The stretchy coil idea isn’t best for Q.
>
> When i want less inductance, i should use less wire, since the ohmic
> resistance otherwise stays the same and the
>
> Q decreases. A few paragraphs in QST i quoted previously demonstrated
> that shorted turns had little actual
>
> effect on Q.
>
> I recall taking apart some old UHF TV converter that had a circular
> tuned line with a shorting slider. Maybe if i
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> can recall some more details of that thing, it will inspire me. ___
>
> I DO have a Q meter that covers the 100 MHz territory but it needs
> some work....anyway this will be an opportunity to
>
> also use my dipmeters, which i haven’t done for a while.
>
> thanks for the suggestions, tho !
>
> -Hue
>
>

27342. Re: [regenrx] Re: OT: compression-variable inductor ?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-27 13:22:35 UTC
From: dulmagedon@...
Topic: 27331 Message: 27342

pg 264 The Accordion Coil Amplifier
I don't think there is anything wrong with the concept. Implementation would not be that difficult and tuning would be quite precise I believe.
donVe3LYX

27343. RE: [regenrx] RE: OT: compression-variable inductor (and VHF regen receiver) ?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-27 20:48:41 UTC
From: Hubert Miller
Topic: 27331 Message: 27343

Somewhere i have a little radio i think maybe was a kit or semi-kit of some kind. It does cover the FM BC band and uses one acorn tube and a transistor
amp with one CK722.
The reason i am interested in the "FM crystal radio" is that a few other people have reported success with it. I mean "relative success". For many years
it was considered not do-able. I was reading on the "Radioboard" website recently about a Chinese tourist's crystal radio testing in some eastern
metropolis. His handheld FM crystal radio only got one station, but it DID work. Yes, it does call for maximum Q if you want to get any volume. That's
the big challenge. The little superregens i think work okay for FM because of the fantastic sensitivity of the superregen circuit despite also having to use
slope detection. (I think i recall actually seeing a circuit in an old Radio News mag showing an actual discriminator transformer fed 2-active device (triodes)
superregen detector. I think that would require too much finessing and i don't think with conventional coil Qs this special transfomer would work very well
at VHF.)
Many years ago, living in Seattle i was playing with crystal radio circuit using a single Ge transistor in kind of an enhanced detector circuit - no external
bias tho. For some reason it picked up a local FM station all across the range. I needed to put a small RFC in the antenna lead to block the VHF. I still don't
understand the mechanism of how the FM detection worked.
There were some posts here a couple years back about a circuit called, i think, the Hellendyne, which was a straight regenerative receiver - not superregen -
for the FM band, and the builder reported something like dozens of stations he was able to pick up with it - whereas the wide selectivity of a superregen
would mean you could maybe distinguish only a few stations across the FM band. I had, like most people, believed a straight regen was impossible on VHF,
but i was disabused of this belief years back when i read in "Amateur Radio Techniques" by Pat Hawker, there was a circuit for a 2-meter hamband regen
receiver.
-Hue

>I think what you saw may have been a Mallory "Induc-tuner" (I think I have the name right), popular in the late 40's and early 50's. Probably hard to find info on the gadget now, but it was used in fairly wide range VHF tuning units, as an alternative to rotating "turret type" tuners. Some vintage VHF communications receivers (Nems-Clarke) used this system. They were used in USAF tracking stations, such as the one at Vandenberg AFB (the Pacific Missile Range) in California, and tuned roughly 50 to 275 MHz. I worked there in the 60's and 70's. If you find someone with a fairly comprehensive junk box they may have one. You may be able to find pictures on Wikipedia or some similar place.

>I do have to ask why you are attempting to build a VHF FM crystal set. You do realize that FM does not detect properly with a standard diode detector. Yes, a method called "slope detection" can be used, but to do so requires significantly more selectivity that the "Q"

of a straight diode detector offers. A simple super-regen will work reasonably well. Such a design appeared in Popular Electronics magazine in 1964 (don't remember which month, could have been April. Wow - that was going on 60 years ago!) Regeneration serves to significantly boost the "Q" of a tuned circuit, of course.

>Used a single 6C4, which I built and was surprised how well it did. This was in the days when the FM BC band was significantly less populated than it is today. Not too sure how it would do today, but I do encourage you to try it. A transistor version would be fun too. - Jim, KL7CC

--

27344. compression-variable inductor ? NOT PDFs just images

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-28 04:27:28 UTC
From: Rob
Topic: 27331 Message: 27344

For those of us who can't get to the 300 page PDF to download
HERE is JUST IMAGES:
http://www.learnmorsecode.com/regen5/index.html

On 10/27/2016 09:22 AM, dulmagedon@... [regenrx] wrote:
>
> pg 264 The Accordion Coil Amplifier
> I don't think there is anything wrong with the concept. Implementation
> would not be that difficult and tuning would be quite precise I believe.
> donVe3LYX
>
> __.

27345. compression-variable inductor and capacitors

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-28 04:51:54 UTC
From: Rob
Topic: 27331 Message: 27345

Can anyone tell me what this component is called?
http://www.learnmorsecode.com/regen5/cap.jpg

I think there are FOUR of them in the ACCORDIAN COIL amplifier.
http://www.learnmorsecode.com/regen5/rh-1940-p261-3.jpg
http://www.learnmorsecode.com/regen5/rh-1940-p261-2.jpg

On 10/28/2016 12:27 AM, Rob roomberg@... [regenrx] wrote:
>
> For those of us who can't get to the 300 page PDF to download
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>> Implementation would not be that difficult and tuning would be quite
>> precise I believe.
>> donVe3LYX
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>> __.
>
> __.

27346. Re: [regenrx] compression-variable inductor and capacitors

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-28 05:03:17 UTC
From: Phil
Topic: 27331 Message: 27346

That would be a capacitor, very small value and high Voltage.

73 de Phil, KO6BB.
Specializing in DXing NDBs (Longwave Beacons).

Location: "The Beaconeer's Lair".
Merced, Central California, 37,18,37N 120,30,6W CM97rh
KO6BB/B beacon, ~20W to a Ringo Vertical 24/7 on 28.290 MHz.
http://www.qsl.net/ko6bb/

HF/LF RADIOS:
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
Icom: IC-7200 Xceiver, DSP IF & filters (~2015).
Kenwood: TS-450SAT Xceiver, cascaded 250/125Hz Inrad filters.
SDR: Softrock Ensemble II LF (built from a kit 2015).

ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 4 Port Antenna Multicoupler, Feeds 4 RX's.
AF Filters: Timewave DSP-599zx & HOMEBREW 8 Hz Filter.

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.
Cushcraft AR-10 Ringo at 14 feet AGL for 10M beacon.

On 10/28/2016 4:51 AM, Rob roomberg@... [regenrx] wrote:
>
> Can anyone tell me what this component is called?
> http://www.learnmorsecode.com/regen5/cap.jpg
>
> I think there are FOUR of them in the ACCORDIAN COIL amplifier.
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> On 10/28/2016 12:27 AM, Rob roomberg@... [regenrx] wrote:
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>>> Implementation would not be that difficult and tuning would be quite
>>> precise I believe.
>>> donVe3LYX
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>>> __.
>>
>> __.
>
>

27347. triac circuit excessive heating 1K resistor

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-28 05:16:38 UTC
From: Rob
Topic: 27347 Message: 27347

I built this night light triac circuit.
During darkness..... the 1K resistor runs cool...
when the triac is ON
http://www.learnmorsecode.com/help/triac/nightlight3.jpg

BUT
during sunshine... or a bright flashlight... the triac turns off like it
is supposed to do
and the 1K resistor cooks..... smokes..and ...burns out.

I replaced the carbon 1/2 watt resistor with a 1 watt metal film
resistor and it did NOT
burn out but it does cook up to finger burning temperatures.

IS THIS NORMAL for this circuit by design?

Should the 1K resistor be replaced with a 5 watt CEMENT power resistor
better suited to give up
the heat?

or is this heating really just a bad idea...bad design... fire hazard?

27348. Re: [regenrx] compression-variable inductor and capacitors

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-28 05:24:32 UTC
From: Rob
Topic: 27331 Message: 27348

Thankyou.

I thought is was a capacitor by the schematic but
I never saw one of those before so I was trying to wrap my brain around
how it is made from scratch but the image is not clear enough to
replicate it's
construction.... so I drew the blue air space image... just to ask..if
that is correct..that it is
nothing more than adjustable plates with an air gap??????

On 10/28/2016 01:03 AM, Phil ko6bb1@... [regenrx] wrote:
>
> That would be a capacitor, very small value and high Voltage.
>
> 73 de Phil, KO6BB.
>
>
> On 10/28/2016 4:51 AM, Rob roomberg@... [regenrx] wrote:
> >
> > Can anyone tell me what this component is called?
> > http://www.learnmorsecode.com/regen5/cap.jpg
> >
> > I think there are FOUR of them in the ACCORDIAN COIL amplifier.
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> > On 10/28/2016 12:27 AM, Rob roomberg@... [regenrx] wrote:
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> >>>
> >>> pg 264 The Accordion Coil Amplifier
> >>> I don't think there is anything wrong with the concept.
> >>> Implementation would not be that difficult and tuning would be quite
> >>> precise I believe.
> >>> donVe3LYX
> >>>
>

27349. Re: [regenrx] compression-variable inductor and capacitors

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-28 05:59:36 UTC
From: Phil
Topic: 27331 Message: 27349

Yep, just as couple plates and an air gap (think about it, even the usual classic variable capacitor is nothing more than a group of plates with an air gap.

Now, in some very high power transmitters where the Voltages are extremely high, you'll see something similar, only instead of two plates, it'll have a pair of metal balls (double entendre NOT intended). That is an "air gap" to allow discharge if the peak voltage goes too high. I've seen them on the secondaries of the modulation Xformer in high power AM service, as well as across the HV Filter choke in a power supply. It's there to protect the transformer from insulation breakdown. . .

73 de Phil, KO6BB.
Specializing in DXing NDBs (Longwave Beacons).

On 10/28/2016 5:24 AM, Rob roomberg@... [regenrx] wrote:
>
> Thankyou.
>
> I thought is was a capacitor by the schematic but
> I never saw one of those before so I was trying to wrap my brain around
> how it is made from scratch but the image is not clear enough to
> replicate it's
> construction.... so I drew the blue air space image... just to ask..if
> that is correct..that it is
> nothing more than adjustable plates with an air gap??????
>

27350. Re: triac circuit excessive heating 1K resistor

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-28 07:22:38 UTC
From: mikhail-vulkov@...
Topic: 27347 Message: 27350

Rob, to make circuit more energy efficient, the load should receive less power than maximal. To design this, connect in series with R1 a 2W rheostat and adjust tolerable minimal power.
Mikhail

27351. Re: [regenrx] Re: triac circuit excessive heating 1K resistor

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-28 08:10:19 UTC
From: Rob
Topic: 27347 Message: 27351

I don't own any 2 watt rheostats.... and
I did experiment with a 20K potentiometer which did spark, smoke and burn.

So what IS the test here..to "adjust tolerable minimal power"...
what test points?
voltage?
amperage?
I am an amateur electronics hobbyist.... not an electrical engineer....
...so please be specific.

You said THE LOAD SHOULD RECEIVE LESS POWER THAN MAXIMAL

which load are you referring to?

the triac controls the LAMP LOAD... which is a 100 watt light bulb.

http://www.learnmorsecode.com/help/triac/nightlight3.jpg

I do not understand how that lamp would... or should RECEIVE LESS POWER

On 10/28/2016 03:22 AM, mikhail-vulkov@... [regenrx] wrote:
>
> Rob, to make circuit more energy efficient, the load should receive
> less power than maximal. To design this, connect in series with R1 a
> 2W rheostat and adjust tolerable minimal power.
> Mikhail
>
>

27353. RE: [regenrx] Re: triac circuit excessive heating 1K resistor

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-28 13:31:10 UTC
From: Larry
Topic: 27347 Message: 27353

Try a 100K resistor.

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Friday, October 28, 2016 4:10 AM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Re: triac circuit excessive heating 1K resistor

I don't own any 2 watt rheostats.... and
I did experiment with a 20K potentiometer which did spark, smoke and burn.

So what IS the test here..to "adjust tolerable minimal power"...
what test points?
voltage?
amperage?
I am an amateur electronics hobbyist.... not an electrical engineer....
...so please be specific.

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which load are you referring to?

the triac controls the LAMP LOAD... which is a 100 watt light bulb.

http://www.learnmorsecode.com/help/triac/nightlight3.jpg

I do not understand how that lamp would... or should RECEIVE LESS POWER

On 10/28/2016 03:22 AM, mikhail-vulkov@... [regenrx] wrote:

Rob, to make circuit more energy efficient, the load should receive less power than maximal. To design this, connect in series with R1 a 2W rheostat and adjust tolerable minimal power.
Mikhail

27354. Re: [regenrx] Re: triac circuit excessive heating 1K resistor

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-28 13:31:18 UTC
From: mikhail-vulkov@...
Topic: 27347 Message: 27354

Rheostat means potentiometer connected with two wires as a resistor. A potentiometer with normal size withstand dissipating power 2W. Wattage is printed on it.
You can use potentiometer 5kohm or 10kohm. In such a circuit, the lamp will glow less and you have to judge at what position of rheostat (potentiometer) the light will satisfy your needs.

27355. Re: [regenrx] compression-variable inductor and capacitors

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-28 13:47:56 UTC
From: Jim Simmons
Topic: 27331 Message: 27355

This is called a neutralizing capacitor. It is a low capacity - high voltage variable capacitor. It's used to cancel/offset the interelectrode capacitance of vacuum tubes.

The neutralizing capacitor provides negative feedback to cancel the feedback effect of the internal capacitance of the amplifier. Without it, the positive feedback from the amplifier's internal capacitance may cause the amplifier to go into self-oscillation.

Jim N5MSJ

On 10/27/2016 11:51 PM, Rob roomberg@... [regenrx] wrote:
>
> Can anyone tell me what this component is called?
> http://www.learnmorsecode.com/regen5/cap.jpg
>
> I think there are FOUR of them in the ACCORDIAN COIL amplifier.
> http://www.learnmorsecode.com/regen5/rh-1940-p261-3.jpg
> http://www.learnmorsecode.com/regen5/rh-1940-p261-2.jpg
>
>
> On 10/28/2016 12:27 AM, Rob roomberg@... [regenrx] wrote:
>>

27356. Some beacons heard on my Regen. . .

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-28 15:13:18 UTC
From: Phil
Topic: 27356 Message: 27356

The following is a copy of the message and last night's log that I sent to the NDB (Non-directional beacon) list. I thought it might be of interest to some here as my homebrewed 1V3 (all tube) regen receiver and Low-Noise Vertical antenna was the only equipment used, NO external audio filters etc. I don't doubt that if I'd stayed up a couple more hours that there'd be at least another 20 or so beacons in the log.

****

Last night I decided to use the homebrewed Regenerative Receiver and do what I call a "Retro" listening session. The set is quite a good performer (for 1930's technology) but like a high performance sports car, it's a set that you 'drive', not just kick back and casually cruise the band. With one hand on the tuning, another one on the regeneration control, a third one on the built in audio filter switch and a 4th on the RF gain control (it helps to be an octopus ;-) it's possible to dig out some difficult beacons. Of course it's still NOT up to the performance of my Icom IC-7200 or R-75 combined with the external Timewave DSP-599 and homebrewed 8Hz audio filter combo.

NOTE: DDP-391 in Puerto Rico was quite strong here all evening, starting quite early. I had intended to stay up past midnight to catch some more, but fell asleep about 2230 local time.

The logs, all from live listening, no remote receivers or 'waterfalls', NO rare DX.

DATE GMT KCs ID LOCATION
2016-10-28 0244 344 FCH Fresno, CA USA
2016-10-28 0248 338 RYN Tucson, AZ USA
2016-10-28 0250 335 CVP Helena, MT USA
2016-10-28 0253 333 STI Mountain Home, ID USA
2016-10-28 0258 326 DC Princeton, BC Canada
2016-10-28 0301 344 XX Abbotsford, BC Canada
2016-10-28 0305 359 BO Boise, ID USA
2016-10-28 0305 359 YAZ Tofino, BC Canada
2016-10-28 0309 368 ZP Sandspit, BC Canada
2016-10-28 0310 371 ITU Great Falls, MT USA
2016-10-28 0312 374 LV Livermore, CA USA
2016-10-28 0312 374 EX Kelowna, BC Canada
2016-10-28 0315 378 OT North Bend, OR USA
2016-10-28 0328 382 YPW Powell River, BC Canada
2016-10-28 0329 383 PI Pocatello, ID USA
2016-10-28 0331 391 DDP San Juan Puerto Rico
2016-10-28 0333 400 QQ Comox, BC Canada
2016-10-28 0333 404 MOG Montague, CA USA

2016-10-28 0334 400 ENS Ensenada Mexico
2016-10-28 0336 407 CHD Chandler, AZ USA
2016-10-28 0345 408 MW Moses Lake, WA USA
2016-10-28 0348 521 INE Missoula, MT USA
2016-10-28 0353 203 TCY Tracy, CA USA
2016-10-28 0354 205 COR Corcoran, CA USA
2016-10-28 0359 211 HDG Gooding, ID USA
2016-10-28 0359 209 HGT Jolon, CA USA
2016-10-28 0412 223 YKA Kamloops, BC Canada
2016-10-28 0416 238 MPA Nampa, ID USA
2016-10-28 0420 350 NY Enderby, BC Canada
2016-10-28 0424 359 YQZ Quesnel, BC Canada
2016-10-28 0431 385 WL Williams Lake, BC Canada
2016-10-28 0441 392 PNA Pinedale, WY USA
2016-10-28 0452 200 YJ Victoria, BC Canada
2016-10-28 0510 227 CG Castlegar, BC Canada
2016-10-28 0516 356 MEF Medford, OR USA

--

73 de Phil, KO6BB.
Specializing in DXing NDBs (Longwave Beacons).

Location: "The Beaconeer's Lair".
Merced, Central California, 37,18,37N 120,30,6W CM97rh
KO6BB/B beacon, ~20W to a Ringo Vertical 24/7 on 28.290 MHz.
http://www.qsl.net/ko6bb/

HF/LF RADIOS:
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
Icom: IC-7200 Xceiver, DSP IF & filters (~2015).
Kenwood: TS-450SAT Xceiver, cascaded 250/125Hz Inrad filters.
SDR: Softrock Ensemble II LF (built from a kit 2015).

ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 4 Port Antenna Multicoupler, Feeds 4 RX's.
AF Filters: Timewave DSP-599zx & HOMEBREW 8 Hz Filter.

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.
Cushcraft AR-10 Ringo at 14 feet AGL for 10M beacon.

27357. Re: [regenrx] compression-variable inductor and capacitors

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-28 16:34:18 UTC
From: Rob
Topic: 27331 Message: 27357

thank you

On 10/28/2016 09:47 AM, Jim Simmons orion@... [regenrx] wrote:
>
> This is called a neutralizing capacitor. It is a low capacity - high
> voltage variable capacitor. It's used to cancel/offset the
> interelectrode capacitance of vacuum tubes.
>
> The neutralizing capacitor provides negative feedback to cancel the
> feedback effect of the internal capacitance of the amplifier. Without
> it, the positive feedback from the amplifier's internal capacitance
> may cause the amplifier to go into self-oscillation.
>
> Jim N5MSJ
>
>
> On 10/27/2016 11:51 PM, Rob roomberg@... [regenrx] wrote:
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>> Can anyone tell me what this component is called?
>> http://www.learnmorsecode.com/regen5/cap.jpg
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>> I think there are FOUR of them in the ACCORDIAN COIL amplifier.
>> http://www.learnmorsecode.com/regen5/rh-1940-p261-3.jpg
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>>
>>
>> On 10/28/2016 12:27 AM, Rob roomberg@... [regenrx] wrote:
>>>
>
>

27358. Re: [regenrx] Re: triac circuit excessive heating 1K resistor

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-28 16:39:36 UTC
From: Rob
Topic: 27347 Message: 27358

I did precisely what you said with what I had here.... but turns out
they are 1/2 watt
so
popped ...sparked and burned..... just like the 1/2 watt carbon resistor
did.

Thats when I started asking questions here...about actual design logic.

Manufacturer Part No: B10K OHM
Specifications
Adjustment Type: Top Adjustment
Power: 1/2W
Resistance: 10K OHM

On 10/28/2016 09:31 AM, mikhail-vulkov@... [regenrx] wrote:
>
> Rheostat means potentiometer connected with two wires as a resistor. A
> potentiometer with normal size withstand dissipating power 2W. Wattage
> is printed on it.
> You can use potentiometer 5kohm or 10kohm. In such a circuit, the lamp
> will glow less and you have to judge at what position of rheostat
> (potentiometer) the light will satisfy your needs.
>
>

27364. Re: [regenrx] compression-variable inductor and capacitors

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-28 20:54:14 UTC
From: dulmagedon@...
Topic: 27331 Message: 27364

I build stub ones. if you have a DX 60 look inside and they used one that way. I tried it on a couple of circuits and liked it. Works well on tubes with flat sides.
donVe3LYX

27365. Re: [regenrx] compression-variable inductor and capacitors

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-29 06:58:41 UTC
From: Rob
Topic: 27331 Message: 27365

Have you got a picture of STUB ONES ?

On 10/28/2016 04:54 PM, dulmagedon@... [regenrx] wrote:
>
> I build stub ones. if you have a DX 60 look inside and they used one
> that way. I tried it on a couple of circuits and liked it. Works well
> on tubes with flat sides.
> donVe3LYX
>
> __._

27366. Re: The "zero-tilt" receiver by Vladimir Novichkov.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-29 11:15:57 UTC
From: les.au49@...
Topic: 27267 Message: 27366

After reading about Vlad's work on a regenerative receiver using the Vackar configuration I decided to build a bipolar version. Not necessarily zero-tilt, but certainly Vackar config. I found a circuit and re-drew it as you see find here:

The directory: https://groups.yahoo.com/neo/groups/regenrx/files/zTemp/
https://groups.yahoo.com/neo/groups/regenrx/files/zTemp/
The file: Rx-1608 ....png

This *may* work; we'll see. The file: https://xa.yimg.com/df/regenrx/Rx-1610%2C+bipolar%2C+minimalist.png?token=K8oxvNfiDb0XFKMeSP-D7vakQrPOXtI1FfXi4eZjjsFWCjQxqU_kAvzfh9JVt-39ehN6dwWjf0vZ7VrsNWMTUoferHpPnsKdpZX_5xnqM8kVXJdnBK4zrEWCkkd22uwJFDbmKLsUpfEjJ2h5mA&type=download

I built the circuit on strip-board, according to the circuit.
The circuit isn't a "no-tilt" design, but I can say that the regeneration setting is fairly level across (a narrow) band, and that the "best-regeneration" setting peaks in mid-band. I need to increase the regeneration control at both the lower and higher band edge.

Results: As built, performance was very poor. For example, I built another receiver using the infinite impedance detector and "Q" multiplier recently. Using this set I could receiver the three local stations on the AM broadcast band using an indoor aerial a few meters long.

Before that I build a 2 "toob" Jones superhet - x2 6AK5 tubes. The detector follows Arnie Coro's preferred Hartley configuration fairly well. I feed the 6AK5 mixer with a solid state local oscillator. Using this circuit I can hear broadcast stations at the low end of the B-C band about 80 or 100km distant during the day with very loose coupling to the aerial. (Maybe a few pf). The adjustment of regeneration on this receiver is silky smooth (as Arnie Coro said).

The new biploar experimental circuit performs poorly, (as it stands at the moment) as I mentioned a few moments earlier. I hear squegging around the point of regeneration. (I suspect decoupling the AF stages may fix that.) Connected to a 30m aerial I cannot resolve ANY of the LOCAL stations at the top end of the BC band. I'm confident the set is correctly tuned; When I advance the regeneration control I can hear the signal from the set heterodyne with the local stations on a commercial receiver. The set is working below and above the point of regeneration.

Despite the poor performance I'm not discouraged. (Stupidity knows now limit!!) I spent some time adjusting the other receivers before getting good results. This set my be the same. I want to compare the performance of different sets based on different technology - tube, FET and bipolar.

For the moment I'm going to make a cup of tea and think a little.

Les
2016-10-29

27367. Re: [regenrx] compression-variable inductor and capacitors

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-29 11:33:08 UTC
From: dulmagedon@...
Topic: 27331 Message: 27367

I may have rob. I will look. However It is just a thick stiff copper wire 12 or 14 standing up along side the tube vertical. Bending it till you get it neutralized is all that is required. For the 5 minutes it takes it is well worth the try. Heathkit used t for years and I use it a lot. My linear even has a pair.
donVE3LYX

27368. Re: [regenrx] compression-variable inductor and capacitors

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-29 15:55:07 UTC
From: dulmagedon@...
Topic: 27331 Message: 27368

http://www.arizona-am.net/PHOENIX/NA7RH/6DQ5_Charlie_Pics_rev3.pdf
http://www.arizona-am.net/PHOENIX/NA7RH/6DQ5_Charlie_Pics_rev3.pdf

described here as well
don

27369. Re: [regenrx] compression-variable inductor and capacitors

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-29 18:11:10 UTC
From: Rob
Topic: 27331 Message: 27369

thankyou
It makes more sense now.

I may have rob. I will look. However It is just a thick stiff copper wire 12 or 14 standing up along side the tube vertical. Bending it till you get it neutralized is all that is required. For the 5 minutes it takes it is well worth the try. Heathkit used t for years and I use it a lot. My linear even has a pair.
donVE3LYX

On 10/29/2016 11:55 AM, dulmagedon@... [regenrx] wrote:
>
> http://www.arizona-am.net/PHOENIX/NA7RH/6DQ5_Charlie_Pics_rev3.pdf
>
> described here as well
> don
>
>
> --
>

27370. Re: Using a Darlington pair as an AM detector.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-29 19:37:22 UTC
From: dawmast@...
Topic: 26864 Message: 27370

I have changed the Darlington pair detector unit of my differential pair Q-Multiplier regenerative receiver. T3 of the Darlington pair has been configured as an infinite impedance detector by the RF bypass cap C13 of 10 nF. T4 functions in this case as an AF preamp which is DC coupled by an LPF with R10 and C14 to the output of the infinite impedance detector.

https://www.uploadarchief.net/files/download/regenemitterfollowerdetector.gif

27371. Re: Practical regen for on air use

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-30 00:39:58 UTC
From: wd4nka@...
Topic: 27270 Message: 27371

Don, I use a regen for regular cw communications. Last NRR event (Feb.) I scored eighth highest, with a 25 watt MOPA and a Regenerodyne. Also, I was one of the few that made a lot of those points working France, Italy and Sweden, all on three xtals, 7037, 7045 and 7120. The 5-8kc wide passband at a couple bumps above Threshold was no barrier preventing me from participating in a pile-up. Although a bit of AGC would be nice . . .

It is about to turn 27 years old, I built in in 1990. Flawless, trouble free, it's the most dependable rx I own.

And . . . it's a regen. :)

-gary // wd4nka

27372. Re: Practical regen for on air use

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-30 01:42:58 UTC
From: dulmagedon@...
Topic: 27270 Message: 27372

I am glad to know someone else does full vintage ops. Congratulations . I have several that work real well and a couple of turkeys. I am trying recently to understand what is the difference that makes a good one or a bummer. My worst is the longwave one and next would be the armstrong I built with a pair of 26 tubes . My all time best is the one in the transceiver. I pinch myself everytime I use it. My twinlex I use always with my bare essntials rig. You put up some pretty impressive contact in the NRR . FB.
don

27373. Re: Practical regen for on air use

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-30 10:22:38 UTC
From: parkerp@...
Topic: 27270 Message: 27373

My favourite for on-air use is this ceramic resonator regen for 7 MHz.

I've worked Canada from Australia in conjunction with a 30w transmitter.

Anatomy of a 30 watt 7 MHz CW regenerative transceiver (and a DX demonstration)
https://www.youtube.com/watch?v=-WPAsaS5eFo

https://www.youtube.com/watch?v=-WPAsaS5eFo

Anatomy of a 30 watt 7 MHz CW regenerative transceiver...
https://www.youtube.com/watch?v=-WPAsaS5eFo Circuit description of a homebrew 30 watt 7 MHz CW regenerative receiver - transmitter. Contains demonstration of DX contact made with it.

View on www.youtube.com https://www.youtube.com/watch?v=-WPAsaS5eFo
Preview by Yahoo

73, Peter VK3YE

27374. Re: Practical regen for on air use

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-30 11:01:00 UTC
From: dulmagedon@...
Topic: 27270 Message: 27374

Very impressive. I like how your cer /res tunes. Also your spotting switch. And BTW you test set up wiring doesn't bother me a bit. It even looks vaguely familiar. I have two solidstate stations. one is very low power , about 1 watt and one is about 8 watts and has a vxo in the TX. I wonder if I popped a cerres there if I could get more wiggle. itis on 80M at colurburst freq and I think I even have one of those in my junk box.somewhere. The RX is the slug absorb regen which works very well. I am tempted to dig it out. The TX acted up last time I had it going so I set it aside till I got abitious. Maye its time I took a few minutes and fixed it. Nice going!
I really like how it performs. U have done well.
donVE3LYX

27375. Re: 7.16 Resonator Regen Lives...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-30 22:06:46 UTC
From: rhulett1@...
Topic: 27256 Message: 27375

Changed out the air variable for 3 1N4001 and a 100K audio taper pot. It is unbelievable to me the performance of such a simple receiver. All of the parts (count 35) would likely be in most folks junk box. And if not, the total parts cost can't be much more than $10. And, I could very well imagine using it for CW QSO on 40M.

72, Curt KB5JO

27376. Tuppence for a Carbon Composition Resistor

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-30 23:08:13 UTC
From: Charles Moizeau
Topic: 27376 Message: 27376

Viz. www.goldmine-elec-products.com<http://www.goldmine-elec-products.com>

Then search item # G-21712 to reveal a lot of "over 1,000 resistors...almost all are carbon composition..."

Price is $20.00.

My experience with these people has been that their product statements are truthful; their post charges a bit lofty, and, more importantly the "good stuff" gets snapped up quickly enough so as to cause disappointment (me included).

I suppose a possible caveat is that carbon composition resistors age badly (only a bit like me), but that seems only to be the case if they are in circuit, an extended active duty tour, if you will.

Charles

27377. Re: [regenrx] Re: 7.16 Resonator Regen Lives...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-31 00:16:15 UTC
From: Michael
Topic: 27256 Message: 27377

On 30.10.16 22:06, rhulett1@... [regenrx] wrote:
>
> Changed out the air variable for 3 1N4001 and a 100K audio taper pot.

Is that to facilitate fine-tuning - or for another reason, Curt?
Michael
UK

> It is unbelievable to me the performance of such a simple receiver.
> ...
> 72, Curt KB5JO

27378. Ten-Tec 1254

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-30 19:32:52 UTC
From: kj6ix@...
Topic: 27378 Message: 27378

Greetings

I'm working on a Ten-Tec 1254 and I'm having problems. When I place a signal (9Mhz) from my signal generator to the antenna input I show a nice clean signal at the input to FL2. What hear on the audio output speaker is tone plus a lot of scratching type static. When I cut the foil at the output of FL2 I show a clean signal there. Now the audio is clean with no static type noise when I place a audio signal at the input to pin 6 of U9.
Any ideas anyone ?

Dale KJ6IX

27379. Re: Ten-Tec 1254

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-31 01:16:41 UTC
From: les.au49@...
Topic: 27378 Message: 27379

Hello Dale,

I found the manual - (2 actually) but the resolution is poor, and I can't identify U9.
With imagination, I can identify FL2.

Can you suggest a place where I can find a circuit I can see more easily?

You description of the noise in the speaker is exactly that - noise.
It can come from resistor, capacitor (often electrolytic) or transistor.

However, I guess that you U9 is close to FL2 (or even directly connected to FL2, and (if that is so) this hints at the filter itself. (But remember - this is merely a wild guess based on my "guess" about your troubleshooting ability. Don't be misled! I may be wrong!!)

Can anyone point to legible circuit?

Les

27380. Re: [regenrx] Re: 7.16 Resonator Regen Lives...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-31 04:55:34 UTC
From: Rob
Topic: 27256 Message: 27380

Yep... and we can thank PETER PARKER VK3YE for all this fun......
all inspired by his YOUTUBE videos.

On 10/30/2016 06:06 PM, rhulett1@... [regenrx] wrote:
>
> Changed out the air variable for 3 1N4001 and a 100K audio taper pot.
> It is unbelievable to me the performance of such a simple receiver.
> All of the parts (count 35) would likely be in most folks junk box.
> And if not, the total parts cost can't be much more than $10. And, I
> could very well imagine using it for CW QSO on 40M.
>
> 72, Curt KB5JO
>
>

27381. Re: Practical regen for on air use

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-31 10:04:58 UTC
From: david.newkirk@...
Topic: 27270 Message: 27381

Gary wrote:

> I use a regen for regular cw communications.

Although I sometimes sub in commercial receivers (Yaesu FR-101S rescued from junk, Drake R-4A "for parts or not working") for a spell, the receiver at W9BRD is usually homemade, and if it is it usually uses a regenerative detector. The regen-based receivers include two detector-at-signal-frequency tuners (one at 80m with a 5686 Hartley detector and the other at 40m with a synthetic-tetrode triode-connected-6AK6s detector, both based on the circuit at http://dpnwritings.nfshost.com/ej/wr/ http://dpnwritings.nfshost.com/ej/wr/) and two detector-at-IF receivers (one an 80/40 band-imaging job with solid-state local oscillator, diode-ring mixer, two-2N3904s post-mixer amplifier and a 12A6 Hartley detector at 1843 kHz and the other a crystal-controlled-front-end 80/40/30m job with a 12A6 Hartley detector operating at 3023 kHz +/- a few kilohertz for tuning around). Photos of some of these receivers (and the 7060-12A6 AF amplifier/filter box that amplifies their audo to headphone/speaker level) are available at http://dpnwritings.nfshost.com/ej/pictures/ http://dpnwritings.nfshost.com/ej/pictures/ .

BTW, a regenerative detector protected by good AGC is a fine thing. I've experimentally moved my 80-meter regen down to 3180 kHz and fed it with the (heavily AGCed) IF output of the FR-101S, and it worked just fine.

The only non-regen homemade receivers at W9BRD include an NE602-based direct-conversion detector in my Summer40Winter80 station-in-a-box contraption, and the 2N3904s-differential-amplifier-as-mixer 40m job that shares a pencil tin and a Twix box with my 40m detector-at-signal receiver (http://dpnwritings.nfshost.com/ej/pictures/pictures3.htm http://dpnwritings.nfshost.com/ej/pictures/pictures3.htm). Since those pictures were snapped I added a second dual-gang cap (in the right-hand Twix box) to give both receivers a fine-tuning control, and expanded the tuning range of both to cover 7000-7125 kHz.

All of these homemade receivers are entirely suitable for two-way communications work. That's why I built them!

Best regards,

Dave
amateur radio W9BRD

27382. Re: Practical regen for on air use

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-31 10:17:19 UTC
From: david.newkirk@...
Topic: 27270 Message: 27382

W9BRD wrote:

> All of these homemade receivers are entirely suitable for two-way communications work.

As an example of this, when I worked Don just ahead of 9 AM ET near 7050 kHz this past Sunday, the receiver of choice was the BG-5 80/40 band-imaging job (Hartley regenerative detector at 1843 kHz). That was my first contact using a newly recapped and tweaked Drake 2-NT; Don was using a _homemade_ vintage transmitter with a great authentic sound.

Ham radio healthily, happily and enjoyably proceeds _without_ kilobuck techno-porn computerized lightboxes.

Best regards,

Dave
amateur radio W9BRD

27383. Re: 7.16 Resonator Regen Lives...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-31 10:22:51 UTC
From: rhulett1@...
Topic: 27256 Message: 27383

The air variable takes up a lot of space. So I decided to put tuning diodes onto the circuit board. I'll take a picture soon and post it. If someone wanted to build one of these with readily available parts, the diodes of course are the way to go.

Tuning is just the same as with the air variable.

73, Curt KB5JO

27384. Re: Practical regen for on air use

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-31 11:32:35 UTC
From: dulmagedon@...
Topic: 27270 Message: 27384
Attachments: 1 described; binary payloads are missing from this source WARC

And what a privilage to work you David. I have been playing with a longfellow of my own concoction. Five 25L6 tubes bought for $5 each NOS , some maple straping , an old ceramic trimmer cap and a handful of parts.. PSU is what we call here AC/DC or transformerless and fits nicely on the bottom out of site. Two crystals in the socket selectable by a DTSP switch. I built this in "just for fun" style without a schematic just using circuits I am familiar with. From the moment I plugged it in it has been doing a decent job for me and I have gotten to really enjoy using it. It is still morphing. For instance today I will try different screen voltage as I suspect I may be low however I am already ready to turn it back to original if my guesses prove wrong. I have also built a 20M one which is about 70% done as well as a 7 pin miniature tube version aka "The Pigmy". It just needs the tank circuit made for the output and it will be smoke tested. For the longfellow I would like to build the old superhet design which was essentially a 1700kc normal regen with a 80M/40M converter in front. I have a set of 1931 Grimes IF cans (round ones with screw on lids.) and It is my understanding they should be the right ones. It will also be transformerless with either 50L6 or 25L6 tubes . Reason? There is no reason. just company policy ;>)
Here is the one I used to work Dave yesterday. Would like to log you all. Actual freq is about 7052kcs using my favourite rock.
donVe3LYX

27385. Re: [regenrx] Re: 7.16 Resonator Regen Lives...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-31 11:34:09 UTC
From: Michael
Topic: 27256 Message: 27385

That figures, Curt. When I am old (it's all relative) I might
bravely try tuning diodes - if I can shake off my air-variable-addiction...

Looking forward to the pics,

Michael
UK

On 31.10.16 10:22, rhulett1@... [regenrx] wrote:

The air variable takes up a lot of space. So I decided to put tuning
diodes onto the circuit board. I'll take a picture soon and post it.
If someone wanted to build one of these with readily available parts,
the diodes of course are the way to go. Tuning is just the same
as with the air variable.

27386. Re: [regenrx] Re: 7.16 Resonator Regen Lives...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-31 11:58:53 UTC
From: dulmagedon@...
Topic: 27256 Message: 27386

Might I speak a moment on the variable cap addiction.
For me finding them is a struggle. I know I could buy new but in retirement buy is a word one should not use too freely. Lately I have built several rigs with slug tuning and fixed cap. Both TX and Regens .I have been suprised at the results. It works very well and gives a level of control of tuning I had not experienced before. The space it saves is also remarkable.
donVE3LYX

27387. Re: Ten-Tec 1254

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-31 04:49:25 UTC
From: kj6ix@...
Topic: 27378 Message: 27387

Thanks Les

During my trouble shooting I had cut the foil between FL-2 (455khz filter) and U9 pin-6 (1st IF Amp) this did isolate the two ckts. I was able to see signals using a scope on the output of FL-2 which tells me this portion of the ckts was working. My audio was working again with no input from FL-2. I did inject a source at pin 6 and I had great audio no distortion. I did couple these two ckts with a .1 uf cap. and things start working ! great to hear station again ! but why ? I have been listening to stations all day and it has been working great.

The next problem is were to buy replacement parts ? such the volume control 10k audio pot ? the pot is 1/2 square. Those pots that Ten-Tec used in this kit suck ! I did mange to damage it.

Dale KJ6IX

27388. Re: 7.16 Resonator Regen Lives...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-31 13:11:41 UTC
From: rhulett1@...
Topic: 27256 Message: 27388

A PTO is certainly FB. All of my old Ten Tec and Drake gear use them. Applaud anyone capable of building them. I guess they are easily constructed by those with abilities I don't have. A 50 cent pot and several 10 cent diodes (if not already in the junk box) is easy for me. The main reason originally used the air variable is it didn't require adding pads to the board and found it before finding the diodes here.

Originally bought some air variables intending to clone a Paraset. Still looking for the round "toit".

72, Curt KB5JO

27389. Re: [regenrx] Re: 7.16 Resonator Regen Lives...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-31 14:04:40 UTC
From: Michael
Topic: 27256 Message: 27389

My comment was a bit tongue-in-cheek, Don.
Almost all my bits are scavanged or inherited.

I just happen to have a wee hoard of venerable variables
from my SK dad and an SK neighbour, which I, too, could not
consider purchasing. I would esconce polycons, but love slug-tuning,
and have scavenged worm-drive pots from old TV tuners and will
reverently use them with worthy Si diodes or varactor diodes one day!

I have decided not to post a jpg of the boat-anchor-style
variable C salvaged from an ancient VFO. It is as big
and heavy and as magnificent as its mechanics...

Michael
UK

On 31.10.16 11:58, dulmagedon@... [regenrx] wrote:

Might I speak a moment on the variable cap addiction.
For me finding them is a struggle. I know I could buy new but in
retirement buy is a word one should not use too freely. Lately I have
built several rigs with slug tuning and fixed cap. Both TX and Regens .I
have been suprised at the results. It works very well and gives a level
of control of tuning I had not experienced before. The space it saves is
also remarkable.
donVE3LYX

27390. Re: [regenrx] Re: 7.16 Resonator Regen Lives...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-31 14:48:41 UTC
From: dulmagedon@...
Topic: 27256 Message: 27390

Well do derive that I dont like variables. Just exploring other alternatives and ws surprisedto find them not inferior. Many old car radios were slug tuned BTW. But I would love to see that JPG. I built one out of soup can lides once.
donVE3LYX

27391. Re: [regenrx] Re: 7.16 Resonator Regen Lives...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-31 18:22:11 UTC
From: dulmagedon@...
Topic: 27256 Message: 27391

Well do derive that I dont like variables.
do NOT derive that.(sri)

27392. Re: 7.16 Resonator Regen Lives...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-10-31 22:03:23 UTC
From: rhulett1@...
Topic: 27256 Message: 27392

I posted a picture of the latest evolution of my 7.16 regen in KB5JO album. The three 3001 diodes are visible on one edge, and a dip socket holding the resonator on the other edge. I plan to buy some different frequency resonators to listen on the phone portion of 40M.

The circuit is the same as the original, just use three diodes for tuning instead of the air variable.

GL n 72 Curt KB5JO

27393. Re: Practical regen for on air use

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-01 01:11:47 UTC
From: david.newkirk@...
Topic: 27270 Message: 27393

Don wrote:

> I have been playing with a longfellow of my own concoction. Five 25L6 tubes bought for $5 each NOS , some maple straping , an old ceramic trimmer cap and a handful of parts..

That's a classic -- love the finished slat-board construction, complete with side pieces. (The Longfeller was the subtitle name of "A Beginner's Two-Stage Transmitter" on page July 1946 _QST_, a 6V6-6L6 Boosted Pierce variation on Dana Bacon's "A Versatile Portable-Emergency Transmitter" on page 9 of July 1941 _QST_, You could build the Longfeller in metal or wood, and I bet more built it in wood than metal.)

> From the moment I plugged it in it has been doing a decent job for me and I have gotten to really enjoy using it. It is still morphing. For instance today I will try different screen voltage as I suspect I may be low however I am already ready to turn it back to original if my guesses prove wrong.

I like your choice of the 25L6. It's good for series-heater-string operation -- 5 x 25L6s = the magic number of 125 V for transformerless heating from the line _and_ it's available NOS pretty cheaply even today, probably because they were used in the hundreds as relay or solenoid drivers in early computers.

> From the moment I plugged it in it has been doing a decent job for me and I have gotten to really enjoy using it. It is still morphing. For instance today I will try different screen voltage as I suspect I may be low however I am already ready to turn it back to original if my guesses prove wrong.

Just go easier on the 25L6 screens than you might with a 6L6: 125 V max, 1.25 W max dissipation. The 12L6, 25L6 and 50L6 (and 6W6/12W6/25W6, the same tube rated for vertical-amplifier service) are the same tube with changed-up heater supply (35L6 pretty similar but a bit different), whereas Tuffy 6L6 was the king of AF power tubes and needed up to 250 V on its screen to put out max power at its max plate voltage.

What equivalent tube are you using in the Pygmy? 25B5/C5 or such?

> Would like to log you all. Actual freq is about 7052kcs using my favourite rock.

By my dial you were right there on 7052. I was using a "7050" rock that depending on the transmitter I use puts me somewhere between 7049 and 7049-1/2. Let's keep this action going -- I know that Gary, WD4NKA, has a rock around 7045 or 7047 if memory serves.

What was the receiver for that contact, Don? One of your TwinPlexes? (To those who wonder about the value of regens for two-way work, assuming Don was using a regen, regenerative detectors were used on _both_ sides of this VE3LYX-W9BRD contact (which started with me answering Don's CQ, BTW), with a band-imaging 80/40 superhet-regen with its 12A6 Hartley detector at 1750 kHz in play at W9BRD. [Have been saying "1843 kHz" across a few contacts, but I remember now that once I realized that I didn't care about harmonics of the set's oscillating 1750-kHz detector making weak band-edge markers at 3500 and 7000, I moved it

down to 1750 kHz, and there it stays. It's not a bug, it's a feature! Besides, a detector right on 1700 may suffer interference from an Expanded Band AM station or two if one is close enough as the crow flies.] I also knew that because Don (a) was probably using a regen and (b) is well-versed in The Way Of Crystal Control that he'd hear me even though my signal was nearly 3 kHz away. Users of modern transceivers tend to wear the selectivity equivalent of blinders and rarely tune up and down for replies, whereas with wide regen selectivity one gets panoramic reception for free!)

You faded out before we could get past the initial exchange--the Sun has been pretty hard on 40-m propagation for the past several weeks, and I've had several contacts wherein my correspondent has gone from S7 or S8 to in the noise inside of a minute--but that was maximum fun for a minimal contact, for sure. Next time I'll probably have a homemade transmitter on line--maybe my four-12AQ5s-in-parallel 25-watter or the two-12A6s-in-parallel (or single 12L6/12W6GT) Morning 40 with its ether-busting 8 W out!

Best regards,

Dave
amateur radio W9BRD

27394. Re: Practical regen for on air use

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-01 01:15:46 UTC
From: david.newkirk@...
Topic: 27270 Message: 27394

I wrote:

> Dana Bacon's "A Versatile Portable-Emergency Transmitter" on page 9 of July 1941 _QST_

Oh, forgot to add that I've got an HTMLized reprint of Bacon's article at http://dpnwritings.nfshost.com/ej/w1ctw_tx/ http://dpnwritings.nfshost.com/ej/w1ctw_tx/ . And I must add coverage of the Longfeller below the subhead I've long had in place for it in my Boosted Pierce writeup at http://dpnwritings.nfshost.com/ej/boosted_pierce/ http://dpnwritings.nfshost.com/ej/boosted_pierce/ .

Dave/W9BRD

27395. Re: Practical regen for on air use

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-01 01:27:08 UTC
From: david.newkirk@...
Topic: 27270 Message: 27395

Argh, and it was written by Hadlock, not Bacon, of National. Sure wish we could get that little black-wrinkle steel box new nowadays...

27396. Re: Practical regen for on air use

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-01 02:05:20 UTC
From: dulmagedon@...
Topic: 27270 Message: 27396

I was preoccupied with the rig so had an old HR10 running with its speaker rather ten wear the phones and was listening using the beverage antenna . No reason why I couldnt have been using a regen. Two are with arms reach from where I was sitting. But you caught me superhetting.
I was aiming for screen voltage around 90 to 100. I got it to 84 and since it was working real nice I am going to leave it there. It has good manners, is drawing what I think is the proper plate current and sounds decent. I have elected to invoke "The Cabbage Rule" (Quit while you're a head)and leave it be. I used the stain I had left over from one of my home made fiddles. I seemed to suit the wood. This rig turned out better then I thought. I can rig the bell on the RBN at quite often. For years I never could so something about this rig suits the skimmer perhaps. I have the original article in the 1948 ARRL handbook. I followed the osc loosely but built the 4 tube PA from the heart. I tried a lot of different keying methods but settled on this one.Old Reliable I guess(All cathodes or B neg keying)
The Pigmy is almost done. I used a 6be6 for the osc and I had four 6aq5s so they became the PA. This one will have to use the bench PA so will be running with about 280 B volts coming in although I like to go easy on my osc . Pushing your osc too hard is like watching your Mom shovel snow. Not a good idea.
I have played with several 50l6 (and 50c6) rigs I made. I have a bare essentials which I built 50l6 but now has a 50c6. My first transceiver project was two 6sn7s and two 50L6 tubes. I replaced them with a 6l6 in the Rf PA and a 6v6 in the audio PA. And yes it is a regen , single control dual variable cap. It is an AM transmitter screen modulated and basically the Powerhouse regen build for the Regen. I have several 6L6 transmitters (about 30 tx s here and about 70% of them homebrew) I like best the 6L6 EH tall boy . BUT would like to try a KT88 someday.
Yes the band dropped out. You were banging in here super and then "poof" you was gone! Soon winter conditions will be here and we can play all day.
Very much enjoyed the QSO.
donVE3LYX

27397. Re: Practical regen for on air use

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-01 02:11:09 UTC
From: dulmagedon@...
Topic: 27270 Message: 27397
Attachments: 1 described; binary payloads are missing from this source WARC

Bench PSU sri (not bench PA)
don
This was my first transceiver build I spoke of.

27398. Re: [regenrx] Re: Practical regen for on air use

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-01 02:24:40 UTC
From: Jim Wiley
Topic: 27270 Message: 27398

You can indeed get the little black steel wrinkle finish box. With a couple of caveats: (1) the box may be made from aluminum instead of steel (2) you might have to paint it yourself, but don't worry, spray cans of wrinkle paint have improved over the years, and work pretty well - assuming you follow the directions.

- Jim, KL7CC

On 10/31/2016 5:27 PM, david.newkirk@... [regenrx] wrote:
>
> Argh, and it was written by Hadlock, not Bacon, of National. Sure wish
> we could get that little black-wrinkle steel box new nowadays...
>
>

27399. Re: [regenrx] Re: Practical regen for on air use

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-01 10:59:19 UTC
From: dulmagedon@...
Topic: 27270 Message: 27399

I had the XYL get me a Black square file box. I built a rig inside of it but I am not happy with the rig so itis getting a redisign. The box is good though however I really like wooden radios. And the shock hazard factor becomes very low unless you hunt for a bad place to put your fingers.
don VE3LYX

27400. Re: [regenrx] Re: Practical regen for on air use

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-01 11:14:02 UTC
From: Michael
Topic: 27270 Message: 27400

I like the valve-socket slot. Neat idea, even in metal -
especially if you don't have a hole-punch.

And surely, although we know we should disconnect the HT and
discharge any big capacitors, we will all occasionally succeed in
finding a bad place for our fingers when turning the chassis over :-)

Michael
UK

On 01.11.16 10:59, dulmagedon@... [regenrx] wrote:

> ... however I really like wooden radios. And the shock hazard
> factor becomes very low unless you hunt for a bad place to put your fingers.
> don VE3LYX

27401. Re: Practical regen for on air use

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-01 12:12:34 UTC
From: david.newkirk@...
Topic: 27270 Message: 27401

Don wrote:

> I followed the osc loosely but built the 4 tube PA from the heart. I tried a lot of different keying methods but settled on this one.Old Reliable I guess(All cathodes or B neg keying)

Yes, the original Hadlock circuit had us keying just the amplifier screen--can't have one side of the key grounded then, and there's quite a backwave.

The 6BE6 is a good oscillator-tube choice because of its high transconductance, making it go easy on the crystal and getting the most out of sluggish ones. Sticking just to triodes, I found with my Novice Rig Roundup Boosted Pierce (http://dpnwritings.nfshost.com/ej/pictures/pictures4.htm http://dpnwritings.nfshost.com/ej/pictures/pictures4.htm) that a 6AB4 (half of a 12AT7) gave a much better note and less crystal stress than the traditional half-of-a-12AU7 6C4 in that position.

Cathode keying is just "cutoff voltage keying," and that'll be only a few tens of volts (for the final amp at least) with tetrode-connected 25L6s. But if we key the cathode _and the grid leak_, then it's B-minus keying and the full supply voltage awaits us at the key! (And we endanger the tube's heater-to-cathode insulation if the heater return is connected to common.) When my dad spruced up a Lettine 240 (6L6 oscillator, 807 final) to serve as my Novice rig he built in that all-RC differential-keying circuit from the keying chapter of a late-1960s ARRL Handbook. Unbeknownst to both of us, that circuit uses cathode keying for the final but B-minus keying for the oscillator, and since they were both keyed on the same wire, I had quite the wake-up jolt on trying to tighten the key connections during a particular sleepy late-night session on 80 meters!

> I have a bare essentials which I built 50l6 but now has a 50c6.

I built a Bare Essentials transmitter into a metal index-card box at age 15 or so and never ended up putting it on the air. As I was testing it on the bench, the next-door neighbors knocked on the back door and complained about sudden, intense TV interference. Sure enough, one more quick test found that even with the thing feeding just a light bulb load, every time I pressed the key Channel 2 went bright-white herringbone. I had built a very nice VHF junk generator (and was decades away from understanding the cause and its cure--a 47- or 100-ohm stopper resistor between the tube's screen and/or plate pins and the outside world would have fixed it handily).

Now I'm thinking about building a QRP Longfeller with 6AN5s...another computer tube. Wire the sockets right and I think 6AQ5s will sub right in with no other changes. Hmm...

Best regards,

Dave
amateur radio W9BRD

27402. Re: Practical regen for on air use

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-01 16:01:53 UTC
From: dulmagedon@...
Topic: 27270 Message: 27402

When I keyed the screens I put a very high value resistor to ground on Key up. Not enough to bother power but enough to give the screens a definate place to park. What annoyed me was the osc always running. So I put a switch in to kill that and then said to my self. "self, this is silly. you know how to cathode key. Quite fooling around. I between I tried keying only the PA cathodes and a couple for other adventures. My first few contacts were though, with Screen keying. I have had good luck with my bare essentials rig. I often use it still. I must have gotten lucky. No complaints so far. It is in the mud room about 10 feet from the XYLs TV . She knows when I turn the linear on and am off tune. Anyway it is what I use the twinplex with.
Finished wiring the Pigmy this morning. Need to double check it and then work up the nerve for smoke test. That sometimes takes me a day or so.
Anyway Building as many of us know is fun.
Got to do some outside work now but later in the day I will be beating again on the Longfellow.
donVe3LYX

27403. OT: Heathkit HD-1250 dipper circuit

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-01 18:32:29 UTC
From: Hubert Miller
Topic: 27403 Message: 27403

I posted on regenrx some description of Heathkit dip meter HD-1250 circuit. Specifically the oscillator-buffer and detector circuit.
The buffer is a MOSFET with outputs taken from drain *and source* to (hot carrier) diodes whose outputs are joined. This per
the Heath manual description is a fullwave detector due to out-of-phase outputs to the two diodes. However David Newkirk
astutely pointed out that the driving gate of the MOSFET goes to ground, so the source-to-diode output is actually a source-
follower with an output of <1.
I said i thought the gate should have been returned to the source so you have out of phase outputs without the source output
being a source follower. I bought the manual just to read what Heath said and as i sort of feared, Heath said very little except
their high-level overall circuit description.
I hate to think it, but it looks to me like Heathkit's engineers made a mistake here. But it works "good enough" to do the job
even if it functions not as described. I recently passed up an Ebay offering of a HD-1250; i was thinking of getting one just to
experiment with moving a part around to "correct" the circuit, but i realized i do NOT need another project right now. Maybe
i'll just add it to the list of circuits to 'eventually' breadboard and look at.
Manufacturers do make mistakes. Of course, they have to put out a project on a timeline that eats money as time expires;
unlike us who can put a project aside and pick it up later to try to optimize it. It comes to mind an example Rob (another
Rob) posted a while back on regenrx about the Knight Kit Spanmaster receiver. One coil had been oriented on the chassis
so it sucked out signals at one area of the tuning range of a different band.
Comments invited.
-Hue

27404. Re: OT: Heathkit HD-1250 dipper circuit

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-02 00:14:42 UTC
From: david.newkirk@...
Topic: 27403 Message: 27404

Hue wrote:

> However David Newkirk pointed out that the driving gate of the MOSFET goes to ground, so the source-to-diode output is actually a source-follower with an output of <1. I said i thought the gate should have been returned to the source so you have out of phase outputs without the source output being a source follower.

It's a source follower in both cases. Returning Gate 1 to source or two a tap between common and source would merely change the dc bias level on Gate 1. I was pointing out that equal source and drain Rs does not necessarily result in equal source and drain outputs across equal impedances.

I also think that, as implemented, the overall circuit does operate as full-wave detector, but (I think, without subjecting the gain of both paths to more rigorous analysis) just with somewhat unequal drive across signal polarities. Assuming that the drive from the source-follower path is enough to push the associated diode into conduction--which it likely is [esp with hot-carrier diodes at work] or Heath wouldn't've done it-- the result would likely provide more net AF output than just a half-wave detector driven from the MOSFET drain.

BTW, we likely run into a dead end if we go on to ask, rhetorically, "But wouldn't operating the drain at a much higher impedance give more output with a half-wave detector than the low-Z full-wave detector?" because the detector is expected to provide useful output across the very large frequency span covered by the dipper oscillator. Operating the buffer/amplifier-MOSFET drain at a significantly higher impedance with the aim of driving the drain diode harder for more output would run into diminishing returns with rising frequency as a result of gain rolloff through net shunt capacitance. Tuning the drain to resonance could maximize signal at the drain, but only at a spot frequency. leading to a dipper with two tuning controls! :-) ("Tuning out stray capacitance" by means of resonance is one of the pillars of radio technique; patent wars [look up "four sevens patent" and "patent 7777"] were early fought over monetizing its benefits.) So I think Heath's approach here is a practical tradeoff between gain/output and instrument frequency response.

Best regards,

Dave
amateur radio W9BRD

27405. Re: Practical regen for on air use

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-02 01:01:03 UTC
From: dulmagedon@...
Topic: 27270 Message: 27405

Pigmy is alive. Nixed the 6be6 in favour of another 6Aq5. Now for the trials and mods that brings. It is 80M only. .
BTW Been on 40m with the longfellow wearing earphones. Using my 56/58 regen.
don VE3LYX
My GDO is a homebrew , one fet, one led and a few resistors and caps. Light goes on right on resonance. Circuit is so simple it is embarassing but I use it often instead of my Booton Measurement unit.

27406. Re: [regenrx] Re: Practical regen for on air use

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-02 01:24:25 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27270 Message: 27406

Dear amigos !

I am very interested in obtaining the circuit diagram of your Grid Dip Meter with a FET and a LED..., because high sensitivity D'Arsonval movement meters are not found locally...

It would be a very nice option for Cuban hams that are enjoying home brewing equipment but do not have access to instruments... Locally you can buy a digital multimeter (although very expensive) and build your own signal generator...

Please reply , if possible with circuit diagram to
the e'mail coro at enet dot cu

73 and DX
Arnie Coro CO2KK

My GDO is a homebrew , one fet, one led and a few resistors and caps. Light goes on right on resonance. Circuit is so simple it is embarassing but I use it often instead of my Booton Measurement unit.

On 01/11/16 21:01, dulmagedon@... [regenrx] wrote:
>
>
> Pigmy is alive. Nixed the 6be6 in favour of another 6Aq5. Now for the
> trials and mods that brings. It is 80M only. .
> BTW Been on 40m with the longfellow wearing earphones. Using my 56/58
> regen.
> don VE3LYX
> My GDO is a homebrew , one fet, one led and a few resistors and caps.
> Light goes on right on resonance. Circuit is so simple it is
> embarassing but I use it often instead of my Booton Measurement unit.
>
>

27407. RE: [regenrx] Re: Practical regen for on air use

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-02 01:57:05 UTC
From: Hubert Miller
Topic: 27270 Message: 27407

I was going to suggest that an incandescent bulb would give a greater range of brightness and maybe greater detectable increments of brightness,
BUT....nothing succeeds like success. I too would like to see the schematic, Don. I was thinking lately of building a dedicated instrument that would
cover just the AM broadcast band. -Hue

>Don VE3LYX
 My GDO is a homebrew , one fet, one led and a few resistors and caps. Light goes on right on resonance.
Circuit is so simple it is embarrassing but I use it often instead of my Booton Measurement unit.

27408. Re: [regenrx] Re: Practical regen for on air use WHAT GDO

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-02 02:31:33 UTC
From: Rob
Topic: 27270 Message: 27408

RE:
"My GDO is a homebrew , one fet, one led and a few resistors and caps.
Light goes on right on resonance. Circuit is so simple it is embarassing
but I use it often instead of my Booton Measurement unit."

Can you take a picture of your GDO circuit and schematic?
I have not home brewed a GDO yet. I have only read about them.

On 11/01/2016 09:01 PM, dulmagedon@... [regenrx] wrote:
>
> Pigmy is alive. Nixed the 6be6 in favour of another 6Aq5. Now for the
> trials and mods that brings. It is 80M only. .
> BTW Been on 40m with the longfellow wearing earphones. Using my 56/58
> regen.
> don VE3LYX
> My GDO is a homebrew , one fet, one led and a few resistors and caps.
> Light goes on right on resonance. Circuit is so simple it is
> embarassing but I use it often instead of my Booton Measurement unit.
>
>
> --
> Post

27409. Re: [regenrx] Re: Practical regen for on air use WHAT GDO

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-02 04:03:14 UTC
From: dulmagedon@...
Topic: 27270 Message: 27409

First I see I said light goes "on" ? No the Light or LED goes out. I think the circuit overloads and dies on resonance but it is very pronounced. Nothing iffy about it. The light just winks out and right back on if you go by. I 'll do a photo and I hope I still have schematic for it. I started with one from online but morphed it do do my own. I built mine for 3 to 8 mcs. Used a transistor radio poly variable to tune it. Built it in a wood box. Don't laugh when you see it. Just know it works and was used on all the rigs I have built since spring. No plug in coils. No wrestling with cables, no warm up. I know I have the schematic here somewhere and I was sure i already had a photo but can't see it. I will make another in the morning.

27410. Re: [regenrx] Re: Practical regen for on air use WHAT GDO

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-02 04:06:05 UTC
From: dulmagedon@...
Topic: 27270 Message: 27410
Attachments: 2 described; binary payloads are missing from this source WARC

[Body unavailable in the source archive]

27411. RE: [regenrx] Re: OT: Heathkit HD-1250 dipper circuit

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-02 06:14:41 UTC
From: Hubert Miller
Topic: 27403 Message: 27411

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Tuesday, November 1, 2016 5:15 PM
To: regenrx@yahoogroups.com
Subject: [regenrx] Re: OT: Heathkit HD-1250 dipper circuit

>>Hue wrote:
>> However David Newkirk pointed out that the driving gate of the MOSFET goes to ground, so the source-to-diode output is actually a source-follower with an output of <1. I said i thought the gate should have been returned to the source so you have out of phase outputs without the source output being a source follower.

>It's a source follower in both cases. Returning Gate 1 to source or two a tap between common and source would merely change the dc bias level on Gate 1. I was pointing out that equal source and drain Rs does not necessarily result in equal source and drain outputs across equal impedances.

If the gate is returned to the source, the drain circuit is no longer common to the gate circuit (via the formerly shared source to ground resistor.) It is no longer a common-drain circuit = no longer a follower circuit. But as you point out, the bias is upset as the gate is now zero bias.
-H

27412. Re: [regenrx] Re: Practical regen for on air use WHAT GDO [2 Attachments]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-02 06:47:14 UTC
From: Rob
Topic: 27270 Message: 27412

Thankyou

On 11/02/2016 12:06 AM, dulmagedon@... [regenrx] wrote:
>

27413. WHICH GDO fuzzy..... parts values

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-02 08:23:15 UTC
From: Rob
Topic: 27270 Message: 27413
Attachments: 1 described; binary payloads are missing from this source WARC

I put the image here after writing on it.....
http://www.learnmorsecode.com/regen5/GDO2.jpg
Are the capacitors labeled C3 C4 C4 ......01... 0.01uF ?
Is the capacitor C2 ....001... 0.001uF ?
Are the resistors :

R1 180K
R2 1K
R3 5.6K

What is C1?

L1 ?

On 11/02/2016 02:47 AM, Rob roomberg@... [regenrx] wrote:
>
> Thankyou
>
>
> On 11/02/2016 12:06 AM, dulmagedon@... [regenrx] wrote:
>
>

27414. Re: WHICH GDO fuzzy..... parts values

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-02 11:45:19 UTC
From: dulmagedon@...
Topic: 27270 Message: 27414

L1 is whatever you need it for. Centre tapped.
C1is normal transistor variable cap. Anything flowing rf from the coil is 100to 220 pf . Anything bypassing is probably .001 . Anything doing heavy work is .01uf. That is because those are my self rules for building. I woud hve to take it apart to remember what values I used. I just drew the schematic as I usually put one inside every circuit I build. I searched LED GDO and got the basic circuit but as usually adapted it to my junk box and taste. It was for broadcast band originally. I will try and see of somewhere I saved the original. however I am betting that using the guidelines I stated it will work. I tend to run with an idea and poke away at it till I get it to work how I want. I am sorry but I find that playing around fascinating. My favourite in head phrase is I wonder what would happen if ..... However I will endeavour to find the values for you. I have 2 meetings today i must attend but at the first chance I will.
donVe3LYX

27415. Re: [regenrx] Re: Practical regen for on air use WHAT GDO

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-02 12:13:26 UTC
From: dulmagedon@...
Topic: 27270 Message: 27415

I see they are all marked anyway. .ooI .oI and tuning cap 365 pf variable. Really probably does not matter. Anything in the ball park should work. I usually just build then fine tune after the smoke test. When in a jam I ask myself "What is the worst that could happen?"
donVe3LYX

27416. Re: [regenrx] Re: Practical regen for on air use WHAT GDO

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-02 14:40:15 UTC
From: Rob
Topic: 27270 Message: 27416

Thank you.

I like your SELF RULES FOR BUILDING

On 11/02/2016 08:13 AM, dulmagedon@... [regenrx] wrote:
>
> I see they are all marked anyway. .ooI .oI and tuning cap 365 pf
> variable. Really probably does not matter. Anything in the ball park
> should work. I usually just build then fine tune after the smoke test.
> When in a jam I ask myself "What is the worst that could happen?"
> donVe3LYX
>

L1 is whatever you need it for. Centre tapped.
C1is normal transistor variable cap. Anything flowing rf from the coil
is 100to 220 pf . Anything bypassing is probably .001 . Anything doing
heavy work is .01uf. That is because those are my self rules for
building. I woud hve to take it apart to remember what values I used. I
just drew the schematic as I usually put one inside every circuit I
build. I searched LED GDO and got the basic circuit but as usually
adapted it to my junk box and taste. It was for broadcast band
originally. I will try and see of somewhere I saved the original.
however I am betting that using the guidelines I stated it will work. I
tend to run with an idea and poke away at it till I get it to work how I
want. I am sorry but I find that playing around fascinating. My
favourite in head phrase is I wonder what would happen if
..... However I will endeavour
to find the values for you. I have 2 meetings today i mus t attend but
at the first chance I will.
donVe3LYX

I put the image here after writing on it.....
http://www.learnmorsecode.com/regen5/GDO2.jpg
Are the capacitors labeled C3 C4 C4 ......01... 0.01uF ?
Is the capacitor C2 ....001... 0.001uF ?
Are the resistors :

R1 180K
R2 1K
R3 5.6K

What is C1?

L1 ?

>

27417. Re: [regenrx] Re: Practical regen for on air use WHAT GDO

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-02 14:51:03 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27270 Message: 27417

SELF IMPOSED AND VERY EFFECTIVE RULES FOR BUILDING RADIOS AND ACCESORIES !!!

They are very logical and save a lot of time... Plus give you flexibility on parts values. For example, I , out of necessity, need to remove parts from circuit boards... many times add , with a lot of patience, extensions to the short leads, test them and place them on the glass jars that are my storage bins.... Following Don's VE3LYX logic, anytime I need to repair equipment or build something out of the blue... the preferred values list works wonders... A reminder: Even brand new, or NOS parts MUST be tested before using them for a repair job or a new project.... After a bit more than sixty years of tinkering with electronics, I can tell you several anecdotes about defective components going into a repair job or into a new project and finding it extremely difficult to detect !!!

73 and DX

Arnie Coro

CO2KK

On 02/11/16 10:40, Rob roomberg@... [regenrx] wrote:
>
>
> Thank you.
>
> I like your SELF RULES FOR BUILDING
>
>
> On 11/02/2016 08:13 AM, dulmagedon@... [regenrx] wrote:
>>
>> I see they are all marked anyway. .ooI .oI and tuning cap 365 pf
>> variable. Really probably does not matter. Anything in the ball park
>> should work. I usually just build then fine tune after the smoke
>> test. When in a jam I ask myself "What is the worst that could happen?"
>> donVe3LYX
>>
>
>
>
>

27418. Re: Ten-Tec 1254

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-02 16:53:06 UTC
From: les.au49@...
Topic: 27378 Message: 27418

Hello Dale,
Without your set on the work-bench in front of me, I can only guess at the problem. Here is my answer to your question "why". It's a guess. I think the noise you heard in the speaker came from the electrolytic caps "re-forming".

About the pots (and spare parts).
For the moment - can't say.
Can you send a photo?

Les

27419. Crystal filters 2215 kHz

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-02 17:55:56 UTC
From: Hubert Miller
Topic: 27419 Message: 27419

Anyone here been (realistically, not just daydreams for the future) moving forward with plans on a homebrew receiver with an IF of around 2 MHz ?

Reason i ask, i am disassembling a large instrument and i find myself with two 2215 kHz crystal filters, 3 kHz and 250 Hz. I have the SSB crystals for it too
but their freqs make for a very tight SSB bandpass. I have the boards pulled and i can supply schematics with this.

The instrument is a Sierra 128 Frequency Selective Voltmeter. Its sin was just that it is so darn large. As large and heavy as a Hammarlund SP-600 but
not quite as useful. Before i started in with the scalpel i did check it out. It was interesting seeing that WWV was delivering 10 uV from a 3 foot wire
into 600 ohms BUT there are much more compact units out there if you need this capability. I sold 2 of them at Puyallup hamfest for a price so low
i regret it now. The unit is the easiest to take apart equipment i have ever processed. Unlike consumer electronics, it's not built sandwich style and
no insects, dirt etc. inside. The tuning caps are very high quality with strong plates. The power supply came out on one board, complete. Now i wish
i'd kept the other 2 i had an processed them myself. I got the strong feeling the buyer didn't really know what they were, but that was okay with me,
his money was green. Oh yeah, get this, there's a complete board with 100 kHz osc and harmonic generator. The transistors are socketed so that
really kind of dates it.
Now i also have a 19 inch rack cabinet with space 10.5 inches tall. I don't know whether this size is useful to anyone and worth dragging to a
hamfest, or should i just take it to the metal recycle?
-Hue

27420. Re: Crystal filters 2215 kHz

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-03 10:48:21 UTC
From: david.newkirk@...
Topic: 27419 Message: 27420

Hue wrote:

> i find myself with two 2215 kHz crystal filters, 3 kHz and 250 Hz. I have the SSB crystals for it too
but their freqs make for a very tight SSB bandpass. I have the boards pulled and i can supply schematics with this.

Bet those filters came from Blackhawk Engineering of Janesville, WI. 2215 was used as the first IF in one or more of the NC-30x receivers, and Goodman used a pair in his "What's Wrong with Our Present Receivers?" experimental front end in 1957 QST and later in his "Miser's Dream" receiver of 1965. (Of which, as a result of having had low friends in high places I happen to have the full, never-published-in-QST schematic available at http://dpnwritings.nfshost.com/ej/misers_dream/
http://dpnwritings.nfshost.com/ej/misers_dream/ .)

Best regards,

Dave
amateur radio W9BRD

27421. RE: [regenrx] Re: Crystal filters 2215 kHz

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-03 19:43:50 UTC
From: Hubert Miller
Topic: 27419 Message: 27421

Yes, you nailed it exactly. I think there must be VERY few people in our six billions who could name this part.
Thanks for the additional info!
The ‘Miser’s Dream’ looks like a smart design, and i think it maybe outperformed many of the higher priced
factory built receivers out there. The filter matching and switching details the schematic provides may prove
very useful to the next owner of these filters, so it was good to see that too.
Would have been a fun and very capable DX machine to use.
Was this circuit actually built, and if so, do you think the original survives?
-H

>Hue wrote:
>> i find myself with two 2215 kHz crystal filters, 3 kHz and 250 Hz. I have the SSB crystals for it too

but their freqs make for a very tight SSB bandpass. I have the boards pulled and i can supply schematics with this.

>Bet those filters came from Blackhawk Engineering of Janesville, WI. 2215 was used as the first IF in one or more of the NC-30x receivers, and Goodman used a pair in his "What's Wrong >with Our Present Receivers?" experimental front end in 1957 QST and later in his "Miser's Dream" receiver of 1965. (Of which, as a result of having had low friends in high places I happen >to have the full, never-published-in-QST schematic available at http://dpnwritings.nfshost.com/ej/misers_dream/ .)

>Best regards,

>Dave

>amateur radio W9BRD

_’_·_’___

27423. Re: [regenrx] Re: Crystal filters 2215 kHz

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-04 22:00:24 UTC
From: david.newkirk@...
Topic: 27419 Message: 27423

Mike wrote:

> There's that infamous floating diode product detector again. Any comments? Was it actually tested in the "Miser's Dream"?

Yes. Here's what By had to say about it:

"The product-detector circuit is an adaptation of one devised by Don Norgaard ("Single Sideband Reception," _G.E. Ham News_, November-December 1948). In the original with 6H6 twin diodes it looked complicated, but with two germanium diodes (and their finite back resistance used for d.c. returns) it becomes quite simple. With about 6 volts peak b.f.o. voltage and a maximum signal of about 0.1 volt, low-distortion demodulation is assured.<Paragraph>(In a subsequent article ("Signal Slicer," _G.E. Ham News, July-August 1951) Norgaard mentioned that the semiconductor version would be noisy, and that is indeed the case. However, at this point in the circuit the noise is of no consequence, since amplified it only comes up to about the hum level of the set. Hum and detector noise are both masked by amplified background noise.)"

Cool about the subsequent invention and rise of this thing called the In-ter-net is that we may can now directly also access those G.E. Ham News issues via the page at http://n4trb.com/AmateurRadio/GE_HamNews/ge_ham_news.htm http://n4trb.com/AmateurRadio/GE_HamNews/ge_ham_news.htm . You have to hunt through the 1951 issue for Norgaard's comments about germanium-diode-detector noise (it's not in the Slicer article itself).

I will say this about solid-state-device noise, one perhaps not directly related to the noise-resistance-based discussion about germanium diodes replacing 6H6s/6AL5s. Modern AF power amps intended for reproduction of high-dynamic-range digital audio are very quiet, of course, but are commonly not available in packages I can deal with without a jeweler's loupe. And anyway beginning in the late 1970s I adopted the LM38x series AF amps as constructional buddies--they're oh-so-easy to uses as along as you pay attention to layout, ground loops, and power-supply decoupling. But even the best of them is disappointingly noisy, even when configured for minimal gain (not 46 dB, thanks) compared to a garden-variety beam-power-tube AF power stage. My 7060 (triode-pentod)-12A6 (beam power tube) AF utility amplifier is _so quiet_ compared to single-IC solutions that predate the digital-AF age that I keep not building an LM380 equivalent even though I have a sleeveful of the guys.

BTW, fun fact about the 12A6 at W9BRD: Although I do admit to having "a thing" for them, I surprised myself recently by realizing that I now have active projects that use them well in quite a broad range of applications: AF power amplifier (of course; AF filter/amp box); 2N7000-switched mixer (BGCD Regenerodyne); Hartley detector at IF (BGCD and BG-5 Regenerodynes and BRD-160 regen); RF power amplifier (Morning 40 transmitter; puts out 8 to 9 W with a single 12L6GT or two 12A6s in parallel [metal tubes neutralize like a dream compared to glass, though); and--because I was too lazy to spend another 1.5 min searching for one of my 12SJ7s and had 12A6s on the bench--AF voltage amplifier in BRDd-160 160-m

regen. The only 12A6 role missing from active service is "crystal oscillator," and I have a Boosted Pierce in the works that will add that one to the stable (as well as trying out the likes of the 6AN5, 8106, 6AQ5, 8156 and maybe even 7984)!

Best regards,

Dave
amateur radio W9BRD

27427. Re: [regenrx] Re: Crystal filters 2215 kHz

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-06 02:40:38 UTC
From: david.newkirk@...
Topic: 27419 Message: 27427

Ed wrote:

> Then again, a lot of beam tetrodes will work for that purpose without much effort, as long as you put some effort into properly loading them.

True, but in the 12A6 several useful factors come together:

1 It's metal (I have seen later, 12A6GT variants) and therefore inherently well-shielded with Pin 1 connected to common

2 It's heated at 12.6 V, and therefore its heater can be straightforwardly operated directly from fixed-voltage dc supplies commonly available today

3 Along with only three other tubes that I know of (14A5, 7701 and 5686, its direct equivalents by design) it has the lowest heater power (circa 1.9 W) among North American beam power tubes, an important factor in keeping down frequency drift across receiver warm-up

4 It is readily available cheaply, apparently having evaded being considered useful by the "tube audio sounds better, even for program sources that have otherwise entirely solid-state and digital for decades" believers

The warm-up-drift issue is real-world as soon as you want to use a regen for two-way work. I had some fun a few years ago playing with various dual/double triodes as synthetic-tetrode detectors, in particular the 13DE7 dissimilar dual triode (which heats perfectly well at 12.6-ish volts). But the xDE7 takes over 5.6 W to heat, and in the medium-sized enclosure I was using at the time for a test bed, all that heat kept the receiver drifting for an hour or three even with the tuned-circuit components well-spaced from the tube. (I've found the 1631 [12.6 V 6L6] to be a perfectly good regenerative detector tube, for instance, but between its large size and its high heater power [as much as a 13DE7] it's impractical from a component-heating standpoint. I will say that the fact that so many octal power tubes share the 7S/7AC basing makes for fun swapping, say,1631 for a 12A6, and vice versa, in detector experiments. In only a few cases do we have that luxury with miniatures.)

BTW, there was a _premium_ 12A6--the 5659 (https://frank.pocnet.net/sheets/201/5/5659.pdf https://frank.pocnet.net/sheets/201/5/5659.pdf). Some years back I ordered one or two from a Florida concern that had that number in its online catalog and after a considerable delay received two nicely _faked_ 5659s with very, very fresh black paint and very, very fresh white markings _and_ a telltale "12A6" stamped into their base sleeves. (Pages like that at http://www.jacmusic.com/nos/images/Fakes/ http://www.jacmusic.com/nos/images/Fakes/ show up my new-black-and-silkscreened-white-paint genius as a mere piker. At least I was out for just mild adventure and not that Pot Of Golden Sound awaiting those who find the end of the rainbow to score the perfect "matched pair"--there any other kind of pair if you're buying tubes, even if they're pentagrid mixers or VR tubes?--of dual triodes with "black plates" and O/square/halo/whatever getters...

Best regards,

Dave
amateur radio W9BRD

27428. Another regenerative receiver with a two terminal coil.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-06 15:09:13 UTC
From: dawmast@...
Topic: 26864 Message: 27428

While receiving with a BJT infinite impedance detector T3 in my previous posting I noticed that the detector had some bad interaction with the Q-Multiplier stage, causing erratic regeneration control and even backlash when using an MV loopstick coil. When the Q-Multiplier goes into and out of oscillating, the impedance at the base of the infinite impedance detector stage rises due to the increasing DC voltage over the emitter resistor R9 of 100k by the rectifying action of C13. T3 is more biased to cut off, rising its input impedance which causes the Q-Multiplier stronger oscillating. SSB reception was also warbled and less intelligible.

Here I have inserted a detector diode D5 between T3 which is now a buffer stage and the AF preamp stage T4. R9 sets the right bias current through the diode. In this circuit the regeneration control is very smooth.

https://www.uploadarchief.net/files/download/regenwithbuffereddiode.gif

27429. RE: [regenrx] Another regenerative receiver with a two terminal coil.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-06 20:07:37 UTC
From: Hubert Miller
Topic: 26864 Message: 27429

Do you recall what exactly was before the cutoff bias voltage in T3 ?
-Hue

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Sunday, November 6, 2016 7:09 AM
To: regenrx@yahoogroups.com
Subject: [regenrx] Another regenerative receiver with a two terminal coil.

While receiving with a BJT infinite impedance detector T3 in my previous posting I noticed that the detector had some bad interaction with the Q-Multiplier stage, causing erratic regeneration control and even backlash when using an MV loopstick coil. When the Q-Multiplier goes into and out of oscillating, the impedance at the base of the infinite impedance detector stage rises due to the increasing DC voltage over the emitter resistor R9 of 100k by the rectifying action of C13. T3 is more biased to cut off, rising its input impedance which causes the Q-Multiplier stronger oscillating. SSB reception was also warbled and less intelligible.

Here I have inserted a detector diode D5 between T3 which is now a buffer stage and the AF preamp stage T4. R9 sets the right bias current through the diode. In this circuit the regeneration control is very smooth.

https://www.uploadarchief.net/files/download/regenwithbuffereddiode.gif

27430. RE: [regenrx] Another regenerative receiver with a two terminal coil.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-06 20:12:02 UTC
From: Larry
Topic: 26864 Message: 27430

I don’t see the antenna connection. Anybody got a clue?

Larry

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Sunday, November 06, 2016 3:08 PM
To: regenrx@yahoogroups.com
Subject: RE: [regenrx] Another regenerative receiver with a two terminal coil.

Do you recall what exactly was before the cutoff bias voltage in T3 ?

-Hue

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Sunday, November 6, 2016 7:09 AM
To: regenrx@yahoogroups.com
Subject: [regenrx] Another regenerative receiver with a two terminal coil.

While receiving with a BJT infinite impedance detector T3 in my previous posting I noticed that the detector had some bad interaction with the Q-Multiplier stage, causing erratic regeneration control and even backlash when using an MV loopstick coil. When the Q-Multiplier goes into and out of oscillating, the impedance at the base of the infinite impedance detector stage rises due to the increasing DC voltage over the emitter resistor R9 of 100k by the rectifying action of C13. T3 is more biased to cut off, rising its input impedance which causes the Q-Multiplier stronger oscillating. SSB reception was also warbled and less intelligible.

Here I have inserted a detector diode D5 between T3 which is now a buffer stage and the AF preamp stage T4. R9 sets the right bias current through the diode. In this circuit the regeneration control is very smooth.

https://www.uploadarchief.net/files/download/regenwithbuffereddiode.gif

27431. Re: Using a Darlington pair as an AM detector.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-06 21:07:23 UTC
From: dawmast@...
Topic: 26864 Message: 27431

For L1 you can take an MW loopstick for receiving the MW Broadcast band, or a loop aerial for receiving shortwave. A ferrite loopstick kan also be used on shortwave, wind a coil of 7 turns onto the loopstick with a space of a few mm between the windings. You can also use a 10.7 MHz TOKO IF coil for L1, an aerial can be connected via a small capacitor of a few pF onto the top of the tank coil L1.

27432. Regen Rec

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-07 01:40:59 UTC
From: Alvin Schmitt
Topic: 27432 Message: 27432

The GlobeSpan World Band Receiver

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The GlobeSpan World Band Receiver
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Alvin P. Schmitt

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27433. Re: Regen Rec

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-07 11:42:23 UTC
From: dawmast@...
Topic: 27432 Message: 27433

A very unusual regenerative receiver in which there is very much RF amplification between the regenerative stage and the detector stage. But beware the high frequency roll off at higher shortwave frequencies due to the Miller feedback capacitances between the collectors and the bases of the 2N3904s. And I think that this receiver will have much background noise due to the BJT RF amplifier stages between the regenerative stage and detector stage, the noise coming from the regenerative stage is also amplified. At http://americanradiohistory.com/Archive-Poptronics/90s/94/PE-1994-03.pdf http://americanradiohistory.com/Archive-Poptronics/90s/94/PE-1994-03.pdf you can read an article about the original Global Span receiver on pages 33-40.

Advantage of this receiver is that you only need single two terminal coils without coil taps or tickler windings, which makes band switching much easier.

http://www.nutsvolts.com/uploads/wygwam/NV_0602_Williams_Figure06.jpg
http://www.nutsvolts.com/uploads/wygwam/NV_0602_Williams_Figure06.jpg

http://www.nutsvolts.com/uploads/wygwam/NV_0602_Williams_Figure06.jpg

http://www.nutsvolts.com/uploads/wygwam/NV_06...
http://www.nutsvolts.com/uploads/wygwam/NV_0602_Williams_Figure06.jpg

View on www.nutsvolts.com
http://www.nutsvolts.com/uploads/wygwam/NV_0602_Williams_Figure06.jpg
Preview by Yahoo

A much simpler regenerative receiver with a differential pair Q-Multiplier (T1, T2) and a separated detector stage T3 with D2 is this one which also uses a two terminal coil.

https://www.uploadarchief.net/files/download/mc1648-type%20regen%283%29.gif
https://www.uploadarchief.net/files/download/mc1648-type%20regen%283%29.gif

https://www.uploadarchief.net/files/download/mc1648-type%20regen%283%29.gif

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View on www.uploadarchief.net
https://www.uploadarchief.net/files/download/mc1648-type%20regen%283%29.gif
Preview by Yahoo

27434. The GlobeSpan World Band Receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-07 15:47:23 UTC
From: jab3739@...
Topic: 27434 Message: 27434

Have anyone build this receiver? Here is the link giving all the information about it .
The GlobeSpan World Band Receiver http://www.nutsvolts.com/magazine/article/the-globespan-world-band-receiver?utm_source=Newsletter+%2366&utm_campaign=Newsletter+%2366&utm_medium=email

http://www.nutsvolts.com/magazine/article/the-globespan-world-band-receiver?utm_source=Newsletter+%2366&utm_campaign=Newsletter+%2366&utm_medium=email

The GlobeSpan World Band Receiver http://www.nutsvolts.com/magazine/article/the-globespan-world-band-receiver?utm_source=Newsletter+%2366&utm_campaign=Newsletter+%2366&utm_medium=email You should hear what you’ve been missing!! The most unbiased source of international news today is shortwave radio. Here is a unit you can build yours...

View on www.nutsvolts.com http://www.nutsvolts.com/magazine/article/the-globespan-world-band-receiver?utm_source=Newsletter+%2366&utm_campaign=Newsletter+%2366&utm_medium=email
Preview by Yahoo

the author is By Lyle Russell Williams, KC5KBG
http://www.nutsvolts.com/magazine/contributor/lyle-russell-williams-kc5kbg

http://www.nutsvolts.com/magazine/contributor/lyle-russell-williams-kc5kbg

Lyle Russell Williams, KC5KBG
http://www.nutsvolts.com/magazine/contributor/lyle-russell-williams-kc5kbg Lyle Russell Williams, KC5KBG Lyle Russell Williams is a graduate electronic engineer.

View on www.nutsvolts.com
http://www.nutsvolts.com/magazine/contributor/lyle-russell-williams-kc5kbg
Preview by Yahoo

I hope the cutting and pasting of the links comes OK.. As you can see it was in a past issue of Nuts&Volts. June 2002 I believe.
John . kg9dk

27435. Re: Regen Rec

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-07 22:44:57 UTC
From: b_weeber@...
Topic: 27432 Message: 27435

I did a simulation of that rf amplifier. There are 4 stages, each of them amplifiies by 4.2 times or 12.5dB. Two stages are fixed with 25dB and two can be switched in. The amplification can be changed from 25dB to 37.5dB and finally to 50dB. The amplification drops to -3dB at 30MHz.

Some years ago i tried a similar setup with q-multilier, one rf-stage and a square law detector. This works very well for am reception. It behaves a little bit like a crystal detector, but with more selectivity and more sensitivity. The reception works already without going into oscillation.

All the sensitive detector circuits are showing a distortion between 5 and 10%, while receiving weak signals. To reduce the distortion, the detector diode or transistor has to be feeded by a signal as high as 300-500mV. Then the distortion can be reduced to 1% or below. IMO this is exactly, what this Global Span Receiver is doing, it is a "HiFi Regenerative Receiver".

> this receiver will have much background noise due to the BJT RF amplifier stages

I don't think, that this stages are doing any harm to the S/N ratio. They just amplify, what is already there.

Best regards,
Bernd

27436. Re: Regen Rec

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-08 03:51:52 UTC
From: david.newkirk@...
Topic: 27432 Message: 27436

Bernd wrote:

> IMO this is exactly, what this Global Span Receiver is doing, it is a "HiFi Regenerative Receiver".

...for AM.

Cool. Too bad Radio Netherlands has had no English transmissions since 2012. Might want to -update the 14-year-old preamble a bit, as many of yesterday's powerhouse, worth-listening-to international shortwave stations have since abandoned the language.

Best regards,

Dave
amateur radio W9BRD

27437. Re: Regen Rec

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-08 10:00:23 UTC
From: dawmast@...
Topic: 27432 Message: 27437

The best thing you can do, is using a cascode circuit between the regenerative stage and the detector stage, a cascode circuit has a much wider bandwidth than single BJT amplifier stages. An example of a cascode amplifier is this one below. Here it is also used as a Q-Multiplier which is followed by a full wave diode detector.

https://www.uploadarchief.net/files/download/hartleyregenwithcascodeamp.gif
https://www.uploadarchief.net/files/download/hartleyregenwithcascodeamp.gif

https://www.uploadarchief.net/files/download/hartleyregenwithcascodeamp.gif

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https://www.uploadarchief.net/files/download/hartleyregenwithcascodeamp.gif

View on www.uploadarchief.net
https://www.uploadarchief.net/files/download/hartleyregenwithcascodeamp.gif
Preview by Yahoo

27438. Re: Regen Rec

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-08 10:54:03 UTC
From: kf8zn@...
Topic: 27432 Message: 27438

When was this article written??

"An English language shortwave broadcast can be found almost anytime during the day or night."

Well, only if it's Over-comer Ministries.

27439. Re: Regen Rec

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-08 14:51:06 UTC
From: david.newkirk@...
Topic: 27432 Message: 27439

> The best thing you can do, is using a cascode circuit between the regenerative stage and the detector stage, a cascode circuit has a much wider bandwidth than single BJT amplifier stages.

A dual-gate MOSFET, then. A dual-gate MOSFET is two single-gate MOSFETs in cascode. Just as, in effect, a vacuum screen-grid tube can be synthesized by two triodes (or a triode and a tetrode; whatever) in casode.

Best regards,

Dave
amateur radio W9BRD

27440. Re: The GlobeSpan World Band Receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-08 15:06:13 UTC
From: jab3739@...
Topic: 27434 Message: 27440

Thanks for the comments, I am finding that some of the silicon parts are now obsolete and hard to find. This means a lot postage since there will need to be several suppliers. It also dampens my enthusiasm.

I liked several of the features like the only connection to the front panel is DC, the frequency counter circuit, varactor tuning and the toroid coils.

If I continue it will be a modular approach, I might build up the RF amps and see how switching stages in and out works. I like the DC control audio amp circuit, I was trying to remember another audio out put IC that had that build in the IC features, I think I saw it in Sprat. Also will take a look at all the suggested links. thanks.
john.kg9dk

27441. Three tube regen circuit options?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-08 16:04:50 UTC
From: rhulett1@...
Topic: 27441 Message: 27441

I built a Twinplex, used it awhile, then converted it to a 2 tube regen from Aug 1951. I wasn't really happy with either one. Am looking for a circuit with an RF amplifier to isolate the antenna from the regeneration stage, and a regeneration stage using a Hartley oscillator. Ideally appropriate for common 12V filament tubes. I had converted the 1951 to 12V tubes, use my 13.8VDC supply for filaments and series connected 9VDC batteries for the plate supply. No hum.

Any circuit advice for this? I hope to use the existing chassis as a basis for 3 tube.

73, Curt KB5JO

27442. Re: WHICH GDO fuzzy..... parts values

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-08 16:51:03 UTC
From: dulmagedon@...
Topic: 27270 Message: 27442
Attachments: 1 described; binary payloads are missing from this source WARC

I finally received the parcel with my 6aQ5 tubes and was able to finish the Pigmy Longfellow.
I have been running it on 3 tubes in the PA one of which was iffy so I was anxious to pop in 4 good ones. It wouldn't run. Pulled one out nd away it went. check voltages and all was ok. So I decided the xtra capacity from the last tube my have changed the finals tune. I reached up on the shelf and grabbed The Little GDO. Flipping on the switch I checked the final coil tnk . With three tubes , then four. Quite adifference and the smallcap I had wouldn't allow a correction. I bridged 2 turns in the tank coil and checked again. Now was in range. Fired it up and pressed the key BeepBeep in the monitor. Once again the Lil GDO saved the day. ,Quickly and easily. d
(testing on 3579.5 khz when time permits)
Pigmy Longfellow in front , Lil GDo to left and Pigmy;s Daddy Longfellow behind.

27443. Re: Three tube regen circuit options?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-08 21:11:46 UTC
From: les.au49@...
Topic: 27441 Message: 27443

Hello Curt,

You'll see many threads on the RegenRx list about "best receiver" - so I can only repeat advice already given.

First, James Millen gave the best advice regarding any set - build it like a battleship; pay attention to the dial mechanism and consider feeding the filaments with a regulated DC supply. (OK, that last point is more recent, but it's still good advice.) James Millen also makes a final observation - a well constructed set will operate fairly well, without regard to the circuit. This advice may not be so valid for a 3 or 4 tube set. Also, unless you're a purist, consider using 12 volt filament tubes and use a transistorized 12V AF system. You can pick up a complete AF module for a few dollars now.

Next, there is consensus that every added 'toob' gives a good improvement in performance - up to 4 tubes. After that you have to work harder for less benefit. You might expect a three 'toob' set will perform better than your two 'toob' set.

I can't give good advice without mentioning two specific technologies - the regenerodyne and the Jones Superhet. If your interests lie in the 80m-40m region, then consider a band imaging superhet. Arnie Coro speaks well about the performance of the pentode/Hartley detector. In his circuit a pot on the screen grid controls the regeneration by varying the SG voltage. Arnie's advice applies to a specific 'tube' - the 6AK5. I built 'my version' of Arnie's circuit, and his claim (I hope I don't misrepresent his words) - that the regeneration is 'silky smooth' - worked for me. Oh, no growling, no hysteresis and it uses readily available parts. My set is about the point of best adjustment when the SG voltage is between 10-15 volts. I follow Arnie's advice and run the detector supply at 36 volts. I suspect the circuit would perform well with anything up to 60 volts, but I haven't tried that. So I used a 6AK5,but I suspect a 6SJ7 or 6J7 will give good results. Less Gm than the miniature tube - but enough, I think.

When I say, 'my version' of Arnie's Hartley I mean I followed his formula closely, with only one change. David Newkirk writes about the advantage of the "hi-C" tank circuit on the detector. I don't follow that advice to the letter - DN recommends capacitive reactance values below 100 ohms. I chose about 125 ohms. But I don't think David will cane me too hard for this deviance! But David Newkirk's formula is based on sound maths. Try it - even if your detector uses a triode.

Recently Vlad 'N' presented a detector based on the Vackar configuration; I think this design is well worth trying - and I suggest as the detector in a regenerodyne. That's the good news. The bad news is that his circuit depends on a particular 'tube' - the 6AS6. There may be an octal tube that has dual control, like the 6AS6, but I don't know one.

When you chose a specific configuration I'm sure list-readers will offer suggestions that will help. Readers of this list have a lot of experience.

Good luck with your set.
Don't forget to build it like a battleship, using the quality components.

Les

27444. Google and Facebook also have regenerative receiver groups.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-08 21:46:16 UTC
From: dawmast@...
Topic: 27444 Message: 27444

If this Yahoo-group unfortunately shuts down, we will have to switch to other communities about regenerative receivers. Think about The RadioBoard. Google has a solid state regenerative reciver group at Solid State Regenerative Receivers - Community - Google+ https://plus.google.com/communities/111700710411953988036 Facebook has the group Regenerative Receiver Initiative at https://www.facebook.com/groups/1433897393594744/?fref=ts
https://www.facebook.com/groups/1433897393594744/?fref=ts

https://plus.google.com/communities/111700710411953988036

Solid State Regenerative Receivers - Community - ... https://plus.google.com/communities/111700710411953988036 For all people who enjoy building, discussing or operating regens and super-regenerative receivers. Please confine content to solid state designs.

View on plus.google.com https://plus.google.com/communities/111700710411953988036
Preview by Yahoo

27445. Re: [regenrx] Re: The GlobeSpan World Band Receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-08 21:50:22 UTC
From: Alvin Schmitt
Topic: 27434 Message: 27445

THE PEOPLE ARE BACK! Alvin P. Schmitt

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http://www.apsministries.org/

On Tuesday, November 8, 2016 10:06 AM, "jab3739@... [regenrx]" <regenrx@yahoogroups.com> wrote:

Thanks for the comments, I am finding that some of the silicon parts are now obsolete and hard to find. This means a lot postage since there will need to be several suppliers. It also dampens my enthusiasm.
I liked several of the features like the only connection to the front panel is DC, the frequency counter circuit, varactor tuning and the toroid coils.
If I continue it will be a modular approach, I might build up the RF amps and see how switching stages in and out works. I like the DC control audio amp circuit, I was trying to remember another audio out put IC that had that build in the IC features, I think I saw it in Sprat. Also will take a look at all the suggested links. thanks.john.kg9dk

27448. Re: [regenrx] Re: Three tube regen circuit options?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-09 06:00:01 UTC
From: mikhail-vulkov@...
Topic: 27441 Message: 27448

´Michael is right. The lead #5 of L2 should be connected to ground.
Mikhail, BG

27449. Re: [regenrx] Three tube regen circuit options?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-09 07:44:53 UTC
From: Udo Peters
Topic: 27441 Message: 27449

Hi Curt,

an excellent 3-tube regen is the circuit from the RCA tube manual:

http://www.w7ekb.com/glowbugs/rx/Regens/ACRegenRCA1.JPG

You will find a lot of additional information on the web.

73 de Udo dk3bi

Am 08.11.2016 um 17:04 schrieb rhulett1@... [regenrx]:
>
> I built a Twinplex, used it awhile, then converted it to a 2 tube
> regen from Aug 1951. I wasn't really happy with either one. Am
> looking for a circuit with an RF amplifier to isolate the antenna from
> the regeneration stage, and a regeneration stage using a Hartley
> oscillator. Ideally appropriate for common 12V filament tubes. I had
> converted the 1951 to 12V tubes, use my 13.8VDC supply for filaments
> and series connected 9VDC batteries for the plate supply. No hum.
>
> Any circuit advice for this? I hope to use the existing chassis as a
> basis for 3 tube.
>
> 73, Curt KB5JO
>
>

27451. Re: The GlobeSpan World Band Receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-09 15:32:20 UTC
From: dawmast@...
Topic: 27434 Message: 27451

There are more regenerative receivers which you can build with garden variety semiconductors, without worrying about certain semiconductors becoming obsolete. Like this one below which has a differential pair Q-Multiplier and a BJT infinite impedance detector preceded by a buffer stage.

https://www.uploadarchief.net/files/download/mc1648-type%20regen(1).gif
https://www.uploadarchief.net/files/download/mc1648-type%20regen(1).gif

https://www.uploadarchief.net/files/download/mc1648-type%20regen(1).gif

https://www.uploadarchief.net/files/download/mc1648-type...
https://www.uploadarchief.net/files/download/mc1648-type%20regen(1).gif

View on www.uploadarchief.net
https://www.uploadarchief.net/files/download/mc1648-type%20regen(1).gif
Preview by Yahoo

27452. Re: The GlobeSpan World Band Receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-09 17:24:27 UTC
From: mikhail-vulkov@...
Topic: 27434 Message: 27452

DRM1173, the circuit seems as MW AM receiver powered with 3V. Please post how is battery voltage Vcc and freq. bands?

27453. Re: The GlobeSpan World Band Receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-09 20:24:58 UTC
From: dawmast@...
Topic: 27434 Message: 27453

It is a multiband regenerative receiver which runs on a supply voltage of 3 V. L1 can be a medium wave loopstick coil, or a small loop aerial on shortwave. You can also use a ferrite loopstick on shortwave, wind a coil of 7 turns on a ferrite loopstick, spacing between the windings is 2 mm. Advantage of this receiver is its use of simple two terminal coils without coil taps or feedback windings.

27454. regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-10 14:32:14 UTC
From: dulmagedon@...
Topic: 27454 Message: 27454

To go with my longfellow I am starting today on a regen superhet. It is kinda of a free build but will be basically an untuneable appr0x 1700kcs regen with an audio amp on the out side and a SW converter on the in. Tubes will be I plan 25l6 and two 50l6s so power can be stolen from the longfellow or a similar supply. Regen Coil is already made . This could go either way (good or disaster) but should be fun. Regen will be by pot control. Here's hoping ! I want a easy to use , loud enough to hear, matching rxx for my longfellow station.
donVe3LYX

27455. Re: [regenrx] regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-10 15:17:49 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27454 Message: 27455

Congratulations amigo Don for joining the happy users of the
Regenerodyne receiver circuit !

The 25L6 and 50L6 vacuum tubes work very well as a Hartley regenerative detector with screen grid voltage regeneration control. You do not need to run the detector plate voltage much higher than 50 volts (that is my top limit) and the screen grid control provides a very smooth transition towards self oscillation... It works so well that you can make the tube operate at the knife edge of the point where it will break into oscillation, becoming at that point a very sharp selectivity detector.... My typical 40 meters band beginners REGENERODYNE, uses a computer microprocessor clock frequency crystal of 4.000 megaHertz as the mixer injection frequency and the regenerative detector tunes from 3000 to 3200 or 3000 to 3150 kiloHertz for an excellent bandspread coverage. For a general purpose shortwave receiver, a different tuned circuit for the regenerative detector spans from 2 to 4 megaHertz, and using a 6.000 megaHertz crystal to cover from 8 to 10 megaHertz... By changing the crystals at the input converter, ¨a la Collins radio style¨ I can cover many 2.000 megaHertz wide segments of the short wave spectrum.

My only concern with the use of the 25L6 and 50L6 is that they will need to be provided with direct current for the tube's filaments in order to prevent the background HUM in the audio output....

One more note: The well built coil for the regenerative detector is a must and the same holds for a high quality variable tuning capacitor... In the case of your receiver, I see you plan to use a front end variable frequency converter that will require I highly stable VFO for mixing with the input signal.

Second note: All my experiments with vacuum tubes vs. solid state regeneratives show that the vacuum tubes versions are much easier to achieve good reception !!!

73 and DX

Arnie Coro

CO2KK

On 10/11/16 09:32, dulmagedon@... [regenrx] wrote:
>
>
> To go with my longfellow I am starting today on a regen superhet. It
> is kinda of a free build but will be basically an untuneable appr0x
> 1700kcs regen with an audio amp on the out side and a SW converter on
> the in. Tubes will be I plan 25l6 and two 50l6s so power can be stolen

> from the longfellow or a similar supply. Regen Coil is already made .
> This could go either way (good or disaster) but should be fun. Regen
> will be by pot control. Here's hoping ! I want a easy to use , loud
> enough to hear, matching rxx for my longfellow station.
> donVe3LYX
>
>
>
>
>

27456. Re: [regenrx] regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-10 15:29:35 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27454 Message: 27456
Attachments: 1 described; binary payloads are missing from this source WARC

> Image result for superheterodyne receiver
Outstanding HF bands performance , tested up to the 50 mHz band using a cascode RF amplifier (ECC85 / ECC88) with a bandpass dual tuned input filter, a dual triode mixer (12AT7 ECC81) . Crystal controlled oscillator with a 12AT7 ... front end----

Then instead of the 1st IF amplifier a direct variable connection to the variable frequency regenerative detector ....

27457. Re: [regenrx] regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-10 17:03:48 UTC
From: dulmagedon@...
Topic: 27454 Message: 27457

Thanks Arno. Always radio is a great adventure. I built a 50l6 equiped one before but later made it 6v6. Anyway Notes taken. Hopefully I will hear something.
donVe3LYX

27458. Re: [regenrx] regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-10 17:56:35 UTC
From: dulmagedon@...
Topic: 27454 Message: 27458

Ok U sold me . Why would I wind more coils when I can use crystals. Much more useable radio. Possiblities increase tremendously including using a 160M tuneable IF freq (and so running 160m direct.) I have already built a 25l6 crustal osc in the longfellow so I can just duplicate that is a much gentler form. Thanks for steering me right!
donVe3LYX

27459. Re: [regenrx] regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-10 18:13:32 UTC
From: mihail dutchevici
Topic: 27454 Message: 27459

I want to built a regenerodyne for general coverage (3Mc -20Mc) with a regenerative mixer. Somebody knows the frequency of the crystals , the variable IF 1800Kc to 2300Kc. Will have a regenerative mixer, oscillator Xtal, regenerative detector, pentode AF.thank you for some advice, Michael
From: "dulmagedon@... [regenrx]" <regenrx@...m>
To: regenrx@yahoogroups.com
Sent: Thursday, November 10, 2016 12:56 PM
Subject: Re: [regenrx] regen superhet

  Ok U sold me . Why would I wind more coils when I can use crystals. Much more useable radio. Possiblities increase tremendously including using a 160M tuneable IF freq (and so running 160m direct.) I have already built a 25l6 crustal osc in the longfellow so I can just duplicate that is a much gentler form. Thanks for steering me right!
donVe3LYX

27460. Re: [regenrx] regen superhet more options plus a novel VHF Regenerodyne with TTL computer oscillator modules

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-10 18:27:52 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27454 Message: 27460

Dear amigos:

The selection of the tuning range for the regenerative detector of the REGENERODYNE involves the knowledge that 1.7 mHz is the lowest useable frequency, because it is now the top of the AM broadcast band... At night, the 1700 kiloHertz AM stations can leak into the detector !!! That is why after many experiments, I decided to use the lower frequency limit at 2.0 megaHertz that can be completed with a 3.5 megaHertz upper limit. Then your tuning range can provide a nice 1500 kiloHertz tuning range in an area of the radio spectrum that during daylight hours is essentially not used nowadays... At night some signals can leak into the detector stage, especially if it is not well shielded. The ZL2JJ receiver excellent mechanical and electrical construction prevents signals on the IF to enter the detector. Using the 1.8 megaHertz lower limit is a valid option that by a simple switching arrangement feeding the antenna directly to the regenerative detector adds the 160 meter band reception option... My 6AK5 Hartley regenerative detector sensitivity on 160 meters works very nicely indeed !!! But... by using the 2.0 megaHertz lower limit, the dial of the regenerative detector can be calibrated with 1500 units , that when using exact frequency crystals at the front end converter makes possible a very nice approximate frequency reading... Example, with the 5 megaHertz 5.000 crystal , the 2.000 low end tunes to 7.000 megaHertz !!! The 12000 kiloHertz computer clock crystal tunes from 14000 kiloHertz up to 15500 kiloHertz, bringing the 20 meters amateur band and the bonus of the still much in use 19 meters international broadcast band... Also, my front end crystals provide the ¨backward tuning option ¨ by subtracting instead of adding... Example 12000 kiloHertz crystal , minus 2000 kiloHertz (the low end of the regenerative detector) tunes your radio to 10000 kiloHertz , a frequency you can be certain by listening to WWV and WWVH... Then 12000 kiloHertz minus 3500 kiloHertz tunes to 8500 kiloHertz... BUT this option ¨tunes backwards¨ within the tuning range from 8500 kHz to 10000 kHz .

Now for more information about the still experimental VHF Lo-Band Regenerodyne... using computer TTL clock modules.... A 48 mHz module makes possible to build a nice 6 meters receiver... that tunes from 50.000 to 51500 kiloHertz !!! the radio is very stable and it can be used to monitor the 50.110 or 50.125 megaHertz 6 meters band calling frequencies...

On 10/11/16 12:56, dulmagedon@... [regenrx] wrote:
>
>

> Ok U sold me . Why would I wind more coils when I can use crystals.
> Much more useable radio. Possiblities increase tremendously including
> using a 160M tuneable IF freq (and so running 160m direct.) I have
> already built a 25l6 crustal osc in the longfellow so I can just
> duplicate that is a much gentler form. Thanks for steering me right!
> donVe3LYX
>
>

27461. Re: [regenrx] regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-11 01:44:48 UTC
From: msalbert@...
Topic: 27454 Message: 27461

Arnie wrote

In the case of your receiver, I see you plan to use a front end variable frequency converter that will require I highly stable VFO for mixing with the input signal.

Good point I hadn't considered! Using a crystal for the VFO makes for a easily-stable oscillator vs. using LC, and would simplify the project both mechanically and electrically. I think Don's planned "AC-DC" tube lineup is intriguing, guessing he'll need only a small transformer for B+. Looking forward to hearing how it sounds!
Regards,
Mark KB9VKE

27462. Regenerative preselector with or without mixing

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-11 02:43:01 UTC
From: qrp.gaijin@...
Topic: 27462 Message: 27462

I'm investigating a (solid-state) regenerative preselector for a pocket-sized shortwave superhet project with IF=455 kHz. The regenerative preselector (i.e. RF Q multiplier) would, of course, always be operated below the oscillation threshold. I am considering two options:

1. Regenerative preselector without mixing, coupled into a self-oscillating mixer to produce the IF output from the self-oscillating mixer.

2. Regenerative preselector with mixing (e.g. http://www.qsl.net/wd4nka/TEXTS/qdynef.htm http://www.qsl.net/wd4nka/TEXTS/qdynef.htm), where the preselector itself also serves as the mixer, and a separate local oscillator is coupled into the regenerative preselector, to produce the IF output from the regenerative preselector.

For reasons of design minimalism I have chosen to use only two (and no more) active devices for the regenerative preselection and frequency conversion functions. So the mixing function has to be either moved into the local oscillator (option 1) or into the regenerative preselector (option 2).

Is there any reason to prefer one approach over the other? My intuition suggests that option 1 might produce lower IMD, as the regenerative preselector could be biased for linear amplification in this case, whereas option 2 requires (for the mixing action) that the regenerative preselector be biased non-linearly, which seems like it might introduce more IMD (trying to amplify and mix at the same time) and degrade the S/N ratio worse than option 1. On the other hand, even with option 1, the self-oscillating mixer will be prone to IMD as well, which might make options 1 and 2 actually about the same.

As this will be a portable receiver, I will use either a ferrite rod antenna (that has been confirmed to work well at shortwave frequencies) or a whip antenna. Therefore, signal levels will likely be small enough to prevent massive overload of the regenerative preselector stage. Still, I'd like to choose the best option for the front-end design, assuming there is any difference between the two above options.

Any opinions?

Thanks,

qrp.gaijin@yahoo.com
http://qrp-gaijin.blogspot.com http://qrp-gaijin.blogspot.com

P.S. As a side note, I would actually like to use only one active device that does regenerative preselection at RF, while simultaneously oscillating at the LO+IF frequency and mixing the two to produce the IF, but it's rather challenging to do all of this in one device -- though I've seen a one-transistor dual-frequency oscillator by AA1TJ that suggests my one-device idea may be feasible if the gain for the one of the oscillation paths is reduced to serve as Q-multiplication instead. However, it's then questionable whether such a one-transistor configuration could stably be tuned over a wide frequency range.

27463. Re: [regenrx] regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-11 03:01:16 UTC
From: dulmagedon@...
Topic: 27454 Message: 27463

There shall be no transformer . 50=50=25 = 125 volts. my line voltage is between 119 and 127 during a 24 hour period. The radio is on wood , has a keyed plug and enclosed so no shock hazard of any kind exists.
Chassis is made , as is IF coil. Tubes and IF coil are mounted. Most if not all components of a pierce osc have been located. I believe tomorrow I will built the audio PA first. However tomorrow (11th hour 11th day of 11th month) is Rememberance Day in Canada and I plan to operate all my WW2 rigs before 11 AM (160M, 80M and 40M) on 80M 3576, CW, on 40M 7052 CW (spy rig) and 7270 AM . 160M I am not sure. perhaps 1885 AM or CW.
donVE3LYX

27464. Re: [regenrx] regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-11 04:16:12 UTC
From: Phil
Topic: 27454 Message: 27464

"50=50=25 = 125 volts"

That is true for the series heaters. HOWEVER, I seem to recall that you said the tubes were 50L6's and 25L6. IF that's the case, the HEATER CURRENT of the two tubes is different. If I recall my AA5 radios correctly, the 50L6 draws 150mA of heater current, and the 25L6 draws twice that, or 300mA. You'll have to put equalizing resistors across the 50L6 heater connections to to equalize the currents or everything will be wonky. . .

73 de Phil, KO6BB.
Specializing in DXing NDBs (Longwave Beacons).

Location: "The Beaconeer's Lair".
Merced, Central California, 37,18,37N 120,30,6W CM97rh
KO6BB/B beacon, ~20W to a Ringo Vertical 24/7 on 28.290 MHz.
http://www.qsl.net/ko6bb/

HF/LF RADIOS:
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
Icom: R-75, Cascaded 250/125Hz CW-Filt, Panadapter. (~2009)
Icom: IC-7200 Xceiver, DSP IF & filters (~2015).
Kenwood: TS-450SAT Xceiver, cascaded 250/125Hz Inrad filters.
SDR: Softrock Ensemble II LF (built from a kit 2015).

ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 4 Port Antenna Multicoupler, Feeds 4 RX's.
AF Filters: Timewave DSP-599zx & HOMEBREW 8 Hz Filter.

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.
Cushcraft AR-10 Ringo at 14 feet AGL for 10M beacon.

On 11/11/2016 3:01 AM, dulmagedon@... [regenrx] wrote:
>
> There shall be no transformer . 50=50=25 = 125 volts. my line voltage
> is between 119 and 127 during a 24 hour period. The radio is on wood ,
> has a keyed plug and enclosed so no shock hazard of any kind exists.
> Chassis is made , as is IF coil. Tubes and IF coil are mounted. Most
> if not all components of a pierce osc have been located. I believe
> tomorrow I will built the audio PA first. However tomorrow (11th hour
> 11th day of 11th month) is Rememberance Day in Canada and I plan to
> operate all my WW2 rigs before 11 AM (160M, 80M and 40M) on 80M 3576,
> CW, on 40M 7052 CW (spy rig) and 7270 AM . 160M I am not sure. perhaps
> 1885 AM or CW.
> donVE3LYX

>

27465. Re: [regenrx] regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-11 11:34:30 UTC
From: dulmagedon@...
Topic: 27454 Message: 27465

Perhaps , depends where I put the 25l6 in the chain I think. I have been down this road before with my transceiver originally had a pair of 50l6s (transmitter output and audio output) and a pair of 6sn7 s (regen detector and audio preamp as ell as reflex RFamp (gg) If I used 6sl7s which make a better regen I would occasionally lose one. Had I known that I live in a high voltage area (119 to 127) I could have used 12sl7 s or 12sn7s and probably would never have had a problem. Eventually i wanted more output then 50l6 could deliver and rewired it for 6 volt tubes adding a transformer. I still have it and have used it with in the last few months. So I have this idea that if I put the 25L6 at the end of the string the 50l6s wont know the difference as all they will see if 100 volts to share.. I also have some 50c6 tubes which i suspect draw heavier. so I could use them but I think my plan will work and I am willing to gamble a 8 dollar tube to find out. I always ask myself what is the worst that can happen. But you are right , It is not just hook up and go. You have to plan a bit. That is why God invented smoke.
donVe3LYX

27466. Re: [regenrx] regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-11 14:49:57 UTC
From: Phil
Topic: 27454 Message: 27466

Any way you look at it, if you wire the heaters of 2 50L6's and one 25L6 in series, without equalizing resistors across the 50L6 Heaters, you're going to get incorrect Voltage across all the heaters. The Voltage across the 50L6 tubes will be high and low across the 25L6. By how much I'd have to go into the math of it, but it gets a little complicated as straight Ohms law won't work, the heater resistance changes with applied Voltage/temperature.

Still the circuit may work, just not optimum.

73 de Phil, KO6BB.
Specializing in DXing NDBs (Longwave Beacons).

Location: "The Beaconeer's Lair".
Merced, Central California, 37,18,37N 120,30,6W CM97rh
KO6BB/B beacon, ~20W to a Ringo Vertical 24/7 on 28.290 MHz.
http://www.qsl.net/ko6bb/

On 11/11/2016 11:34 AM, dulmagedon@... [regenrx] wrote:
>
> Perhaps , depends where I put the 25l6 in the chain I think. I have
> been down this road before with my transceiver originally had a pair
> of 50l6s (transmitter output and audio output) and a pair of 6sn7 s
> (regen detector and audio preamp as ell as reflex RFamp (gg) If I used
> 6sl7s which make a better regen I would occasionally lose one. Had I
> known that I live in a high voltage area (119 to 127) I could have
> used 12sl7 s or 12sn7s and probably would never have had a problem.
> Eventually i wanted more output then 50l6 could deliver and rewired
> it for 6 volt tubes adding a transformer. I still have it and have
> used it with in the last few months. So I have this idea that if I put
> the 25L6 at the end of the string the 50l6s wont know the difference
> as all they will see if 100 volts to share.. I also have some 50c6
> tubes which i suspect draw heavier. so I could use them but I think my
> plan will work and I am willing to gamble a 8 dollar tube to find out.
> I always ask myself what is the worst that can happen. But you are
> right , It is not just hook up and go. You have to plan a bit. That is
> why God invented smoke.
> donVe3LYX
>
> _

27467. Re: [regenrx] regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-11 15:25:17 UTC
From: john ruccolo
Topic: 27454 Message: 27467

My "Quick and Dirty" suggestion would be to use a 35L6 (if one is handy) instead of 25L6. The35L6 has a 150 MA heater like the 50L6. Yes, that adds up to 135V, so you'll be "starving" the heaters slightly, but it won't require any equalizing resistors.

73,

John, KC2UAK

Sent from my CRM-114

> On Nov 11, 2016, at 9:49 AM, Phil ko6bb1@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
> Any way you look at it, if you wire the heaters of 2 50L6's and one 25L6
> in series, without equalizing resistors across the 50L6 Heaters, you're
> going to get incorrect Voltage across all the heaters. The Voltage
> across the 50L6 tubes will be high and low across the 25L6. By how much
> I'd have to go into the math of it, but it gets a little complicated as
> straight Ohms law won't work, the heater resistance changes with applied
> Voltage/temperature.
>
> Still the circuit may work, just not optimum.
>
> 73 de Phil, KO6BB.
> Specializing in DXing NDBs (Longwave Beacons).
>
> Location: "The Beaconeer's Lair".
> Merced, Central California, 37,18,37N 120,30,6W CM97rh
> KO6BB/B beacon, ~20W to a Ringo Vertical 24/7 on 28.290 MHz.
> http://www.qsl.net/ko6bb/
>
> On 11/11/2016 11:34 AM, dulmagedon@... [regenrx] wrote:
> >
> > Perhaps , depends where I put the 25l6 in the chain I think. I have
> > been down this road before with my transceiver originally had a pair
> > of 50l6s (transmitter output and audio output) and a pair of 6sn7 s
> > (regen detector and audio preamp as ell as reflex RFamp (gg) If I used
> > 6sl7s which make a better regen I would occasionally lose one. Had I
> > known that I live in a high voltage area (119 to 127) I could have
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> > Eventually i wanted more output then 50l6 could deliver and rewired
> > it for 6 volt tubes adding a transformer. I still have it and have
> > used it with in the last few months. So I have this idea that if I put
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> > as all they will see if 100 volts to share.. I also have some 50c6
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> > I always ask myself what is the worst that can happen. But you are
> > right , It is not just hook up and go. You have to plan a bit. That is
> > why God invented smoke.
> > donVe3LYX
> >
> > _
>
>

27468. Re: [regenrx] regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-11 15:44:39 UTC
From: dulmagedon@...
Topic: 27454 Message: 27468

I am just going to build it. Worry is not something I am big into . I doubt the 50l6s know that the 25l6 is a tube and not just a dropping resistor.
donVE3LYX

27469. Re: [regenrx] regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-11 15:47:08 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27454 Message: 27469

Dear amigos: In my high school days series connected filaments (heaters) were the rule in the lower cost TV sets (black and white of course)... Rare filament voltages led to tube designations as 3BN6, 5AT8 and the like... This was a cost saving trick... following the experience with the All American Five radios in the USA and the Phillips and Blaupunkt radios in Europe that used series connected heaters to avoid the expensive power transformers...

I remember having ¨done a conversion¨ of an ALL AMERICAN FIVE tabletop radio to using 6 volts filament tubes, connected to a small heater 6.3 volts transformer... Adding more filter capacitors and a filter choke too... both mods made the radio sound much better... running a 6AQ5 audio output.... No more burned 35W4's or 5OC5's HI HI !! My advice to using 50L6's in series is to include a series voltage dropping wirewound resistor if your line voltage is 120 volts.... and to run the 25L6 with its own separate voltage dropping resistor required to go from 120 to 25 volts ! By the way, both resistors will generate a lot of heat !!! AND, it will be a good idea to install a series connected special voltage dropping resistor made from a non linear material that will start with a high resistance and after heating up drop to a low resistance ... this anti surge devices are life savers for vacuum tube filaments !!!

73 and DX

Arnie Coro

CO2KK

On 11/11/16 09:49, Phil ko6bb1@... [regenrx] wrote:
> Any way you look at it, if you wire the heaters of 2 50L6's and one 25L6
> in series, without equalizing resistors across the 50L6 Heaters, you're
> going to get incorrect Voltage across all the heaters. The Voltage
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> I'd have to go into the math of it, but it gets a little complicated as
> straight Ohms law won't work, the heater resistance changes with applied
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> Still the circuit may work, just not optimum.
>
> 73 de Phil, KO6BB.
> Specializing in DXing NDBs (Longwave Beacons).
>
> Location: "The Beaconeer's Lair".
> Merced, Central California, 37,18,37N 120,30,6W CM97rh
> KO6BB/B beacon, ~20W to a Ringo Vertical 24/7 on 28.290 MHz.

> http://www.qsl.net/ko6bb/
>
> On 11/11/2016 11:34 AM, dulmagedon@... [regenrx] wrote:
>> Perhaps , depends where I put the 25l6 in the chain I think. I have
>> been down this road before with my transceiver originally had a pair
>> of 50l6s (transmitter output and audio output) and a pair of 6sn7 s
>> (regen detector and audio preamp as ell as reflex RFamp (gg) If I used
>> 6sl7s which make a better regen I would occasionally lose one. Had I
>> known that I live in a high voltage area (119 to 127) I could have
>> used 12sl7 s or 12sn7s and probably would never have had a problem.
>> Eventually i wanted more output then 50l6 could deliver and rewired
>> it for 6 volt tubes adding a transformer. I still have it and have
>> used it with in the last few months. So I have this idea that if I put
>> the 25L6 at the end of the string the 50l6s wont know the difference
>> as all they will see if 100 volts to share.. I also have some 50c6
>> tubes which i suspect draw heavier. so I could use them but I think my
>> plan will work and I am willing to gamble a 8 dollar tube to find out.
>> I always ask myself what is the worst that can happen. But you are
>> right , It is not just hook up and go. You have to plan a bit. That is
>> why God invented smoke.
>> donVe3LYX
>>
>> _
>
>
> ------------------------------------
> Posted by: Phil <ko6bb1@...>
> ------------------------------------
>
> "In the interest of Regenerating radio's lost art of Regeneration"
> ------------------------------------
>
> Yahoo Groups Links
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>
>

27470. Re: 7.16 Resonator Regen Lives...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-12 00:22:45 UTC
From: rhulett1@...
Topic: 27256 Message: 27470

Got a 7.28 ceramic resonator, radio tunes 7.15-7.20 with that. Listening to SSB QSOs with it. AM overload in the afternoon on 7.15 from a local AM station.

72, Curt KB5JO

27471. Re: [regenrx] Re: 7.16 Resonator Regen Lives...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-12 00:27:16 UTC
From: Rob
Topic: 27256 Message: 27471

How does it behave at night?

On 11/11/2016 07:22 PM, rhulett1@... [regenrx] wrote:
>
> Got a 7.28 ceramic resonator, radio tunes 7.15-7.20 with that.
> Listening to SSB QSOs with it. AM overload in the afternoon on 7.15
> from a local AM station.
>
> 72, Curt KB5JO
>
>

27472. Re: [regenrx] Re: 7.16 Resonator Regen Lives...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-12 00:31:17 UTC
From: rhulett1@...
Topic: 27256 Message: 27472

I'm listening to it now. It is very stable, works well. Curt KB5JO

27473. Re: [regenrx] regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-12 18:54:58 UTC
From: msalbert@...
Topic: 27454 Message: 27473
Attachments: 1 described; binary payloads are missing from this source WARC

Amigo Arnie wrote:

My advice
to using 50L6's in series is to include a series voltage dropping
wirewound resistor if your line voltage is 120 volts.... and to run the
25L6 with its own separate voltage dropping resistor required to go from
120 to 25 volts ! By the way, both resistors will generate a lot of heat

My suggestion is to parallel the two 50L6, then put those in series with 25L6 so the heater string draws 300 mA at 75 volts. Then add a series diode to halve the power from the 120VAC line and drop the voltage down to effectively about 85VAC. (see attached schematic). I was taught this trick a few years ago and is my favorite to light odd-ball tubes without a heater transformer (or other higher-than-needed voltage). In this case the tube heaters will be overrun a bit, or a series resistor could be added to drop the extra 10 volts.

I haven't actually tried this in a regen so not sure how it would affect receiver performance.

Sorry this is a bit late coming . . . probably Don has his set built and playing by now :-)

Regards,
Mark KB9VKE

27474. Re: [regenrx] regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-12 19:20:57 UTC
From: Leonard Meek
Topic: 27454 Message: 27474

Good idea!

Leonard

----- Original Message -----
From: msalbert@aol.com [regenrx]
To: regenrx@yahoogroups.com
Sent: Saturday, November 12, 2016 8:54 AM
Subject: Re: [regenrx] regen superhet

Amigo Arnie wrote:
My advice
to using 50L6's in series is to include a series voltage dropping
wirewound resistor if your line voltage is 120 volts.... and to run the
25L6 with its own separate voltage dropping resistor required to go from
120 to 25 volts ! By the way, both resistors will generate a lot of heat

My suggestion is to parallel the two 50L6, then put those in series with 25L6 so the heater string draws 300 mA at 75 volts. Then add a series diode to halve the power from the 120VAC line and drop the voltage down to effectively about 85VAC. (see attached schematic). I was taught this trick a few years ago and is my favorite to light odd-ball tubes without a heater transformer (or other higher-than-needed voltage). In this case the tube heaters will be overrun a bit, or a series resistor could be added to drop the extra 10 volts.

I haven't actually tried this in a regen so not sure how it would affect receiver performance.

Sorry this is a bit late coming . . . probably Don has his set built and playing by now :-)

Regards,
Mark KB9VKE

27475. Re: [regenrx] regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-13 02:00:01 UTC
From: dulmagedon@...
Topic: 27454 Message: 27475

No Don is thinking his way through it a bit at a time. Audio section is done. Regen section is about 3/4 done. and pierce osc is pretty well done. I try to do what comes clear to me. Then I invoke what I call The Cabbage Rule. Quit while you're ahead. Somehow when you do that the next step seems to sort itself out overnite. As to heater differences I am not that concerned and that does not mean I think those who are are wrong. It is I dont believe it is significant problem on an expermental junk box build. I could use all 35l6 and add a 6 volt audio preamp and everthing would be perfect and we would all be happy but right now I am more interested in exploring the design idea. The really neat thing about using 50l6 or 25l6 tubes etc is you can also use 6w6 6f6 6y6 6v6 6l6 12l6 35l6 simply by changing heater voltage and adding a transformer. Other then heater to parallel all other wiring stays the same. And I thought about it too. Even with the longfellow. ^a 6v6 osc and 4 6l6EH tall boys at 600 volts would be a fun rig too and would have some serious grunt. Anyway this is for me an intiquing adventure. I hope it turns out ok but time will tell. donVe3LYX

27476. Re: regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-13 07:18:42 UTC
From: les.au49@...
Topic: 27454 Message: 27476

When I was in my teens my neighbour, Geoff D'Emden - VK7ZAS, introduced me to amateur radio.

Money was scare in those times, and I dared to suggest rectifying the mains to supply B+ voltages.
Geoff, who was always aware to the possibility of shock told me that no transformerless sets would be found in his shack.

So I built sets using a transformer. I discovered that the effort in finding (and wiring) a transformer was small compared with the effort needed to built a good set. I'm pleased Geoff took the time to speak to me about safe electrical practice.

Here in Australia, where electrical standards for safety are higher than USA, the use of transformer-less sets is discouraged COMPLETELY. While some may build death traps, their design should not be promoted on public lists such as Regenrx.

Les

27477. Re: [regenrx] Re: regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-13 07:36:39 UTC
From: J Ed
Topic: 27454 Message: 27477

I just purchased, on Ebay, a pair of voltage converter modules. One is a buck converter and the other is a boost converter. I'm going to use them with a 12v battery (or bench supply) to make both 6.3v and 90-350v for tube fun. The cost of the supplies, as well as an aluminum chassis to hold them, was around $30.

The only thing to keep in mind would be to add filtering on the supplies. Switch mode supplies are noisy but the noise can be controlled.

Ed AE7TE

On Sat, Nov 12, 2016 at 11:18 PM, les.au49@... [regenrx] <
regenrx@yahoogroups.com> wrote:

>
>
> When I was in my teens my neighbour, Geoff D'Emden - VK7ZAS, introduced
> me to amateur radio.
>
> Money was scare in those times, and I dared to suggest rectifying the
> mains to supply B+ voltages.
> Geoff, who was always aware to the possibility of shock told me that no
> transformerless sets would be found in his shack.
>
> So I built sets using a transformer. I discovered that the effort in
> finding (and wiring) a transformer was small compared with the effort
> needed to built a good set. I'm pleased Geoff took the time to speak to
> me about safe electrical practice.
>
> Here in Australia, where electrical standards for safety are higher than
> USA, the use of transformer-less sets is discouraged COMPLETELY. While
> some may build death traps, their design should not be promoted on public
> lists such as Regenrx.
>
> Les
>
>

27478. Re: [regenrx] Re: regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-13 09:20:47 UTC
From: les.au49@...
Topic: 27454 Message: 27478

Hello Ed,

(I'm off the main topic now - Regen superhet - so please excuse me.)

I have a 12V to B+ converter here - it's noisy. It makes a LOT of hash!
I want to use it with my regen detector.
At the moment I'm running +36V DC on the B+ line - according to Prof Coro's experience.
I'll have to find a way to filter the noise - and I'll be interested to hear (or read) your experience in filtering. I paid $10 for it. It will supply any voltage from +45V to +180V, at 5 watts, by changing the "program" resistor.

Les

27479. Re: regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-13 10:09:36 UTC
From: dulmagedon@...
Topic: 27454 Message: 27479

Name one person who was electrocuted from a AC Dc set. on 110 120 mains. I have known none ever and I have known a lot of people. Well over 1000. Millions and millions were built and used. Everyday we use stuff plugged in to main directly , some plastic which gives added protection and some metal , especially in the past. 50sand 60s. I asked my Dad once when I was preteens . He said if you were in the bathtub and someone threw the radio in it would be dangerous. (same would apply to an electric drill BTW or a lamp) James Millllen worte a whole one page article on the subject in QST in the 1930s I have ithere and read it through last year. HOWEVER if you wish not to do that I have no problem with that either and I'll not be eating any casaroles either. ;>) I myself do not like hi power rigs like linear amps a such because I don't like being around that much voltage. The fact that there is a transformer involved gives me no comfort whatever. in fact i fail to see how that gives protection. Now if you are on a 220volt mais system then I would be nervous too and while I could steal that here from the clothes dryer or welder plug direct I won't. BUT on my rigs so powered you cannot touch them when running and they are built on wood not metal and that includes my PSUs My twin 811A linear and all these longfellow txs . And my PSUs are fused near minimums. Best protection transformer or transformerless is don't touch it and leave nothing exposed. Shunt feed also goes a long way and is used here .
donVe3LYX

27480. Re: [regenrx] Re: regen superhet and dreadful switched mode power supplies

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-13 12:25:29 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27454 Message: 27480

Dear amigo Les and other list participants...

Having to deal with the challenge of suppressing the HASH, or more properly ¨ broadband noise¨ generated by switched mode power supplies is simply mind boggling ... to say the least.

The generation of zillions of harmonics by the sharp rise and fall of the switching waveform will send Monsieur Fourier to the mental health hospital !!! Harmonics and more harmonics of the main switching frequency are the culprits...

See... switched mode power supplies are now everywhere... and they have become a nightmare not only to us users of the radio spectrum but also to the power utility engineers that have to deal with the dreadful problem of power line waveform distortion caused by those devices !!!

Suppresing the RF hash coming from a 12V DC to B plus converter will prove to be very difficult, because you will need a lot of shielding with steel plate (aluminum boxes will not work) plus at the output you must install a very complex set of RF filters...

Even a simple cellphone battery charger can radiate around it enough RF hash to wipe out signals within a wide frequency range !

EL CHEAPO... that meaning very low cost poorly designed and also poorly assembled switched mode power supplies are a real headache for us radio hobby enthusiasts...

At my new workshop, top priority was given to proper ground connection, plus an AC power line filter that can handle 10 amperes... It took one of my star students quite some time to design the filter that is connected from the power company electric meter to the main workshop ¨operating table¨ where I will be doing soon all my electronic construction work... The same line , provided with additional filtering goes to the adjacent table where my ham radio station will be located....

Finally , my advice... if you want your vacuum tube regenerative receiver to work properly feed it with very well filtered direct current coming from a linear power supply , with the transformer provided with an extra Faraday shield between primary and secondary... high capacity good quality low ESR electrolytics and a well built filter choke will do a great job...and do not forget to include transient suppressors as the input to the power transformer , plus high quality .1 mfd at 600 volts bypass capacitors from each side of the power line to ground....

73 and DX

Arnie Coro CO2KK

P.S. Las evening propagation conditions on the 80 and 40 meter bands
were really poor... the worst in a long time... so bad that I thought
the three radios used to test the propagation from 5 to 10 megaHertz at
my local midnight 0500 UTC were all broken down >!!!

On 13/11/16 04:20, les.au49@... [regenrx] wrote:
>
>
> Hello Ed,
>
> (I'm off the main topic now - Regen superhet - so please excuse me.)
>
> I have a 12V to B+ converter here - it's noisy. It makes a LOT of hash!
> I want to use it with my regen detector.
> At the moment I'm running +36V DC on the B+ line - according to Prof
> Coro's experience.
> I'll have to find a way to filter the noise - and I'll be interested
> to hear (or read) your experience in filtering. I paid $10 for it.
> It will supply any voltage from +45V to +180V, at 5 watts, by changing
> the "program" resistor.
>
> Les
>
>

27481. Re: [regenrx] Re: regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-13 12:32:47 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27454 Message: 27481

Dear amigo Les:

My heartfelt congratulations for your posting about the danger of using B plus provided by directly feeding rectifiers without the use of isolation transformers...

Having received not one but many electric shocks when as a teenager I was helping at a TV repair shop that also catered for radios... I soon learned to install at my little table assigned to me by the owner of the shop, a beautiful 300 Watts capacity one to one isolation transformer, and also a VARIAC with a current capacity of 5 amperes and a voltage range from 0 to 240 volts AC... From those early practical learning days while attending engineering school, I have preserved the practice of using power line isolation via a one to one ratio transformer, a low impedance ground, and also the use of fast acting overcurrent protection... PLUS, a BIG knife switch at the wall marked MAIN SWITCH , so that all power may be cut if someone gets trapped by electricity .... in spanish ¨ INTERRUPTOR GENERAL ¨ that mean main switch...

73 and DX

Arnie Coro CO2KK

On 13/11/16 02:18, les.au49@... [regenrx] wrote:
>
>
> When I was in my teens my neighbour, Geoff D'Emden - VK7ZAS,
> introduced me to amateur radio.
>
> Money was scare in those times, and I dared to suggest rectifying
> the mains to supply B+ voltages.
> Geoff, who was always aware to the possibility of shock told me that
> no transformerless sets would be found in his shack.
>
> So I built sets using a transformer. I discovered that the effort
> in finding (and wiring) a transformer was small compared with the
> effort needed to built a good set. I'm pleased Geoff took the time
> to speak to me about safe electrical practice.
>
> Here in Australia, where electrical standards for safety are higher
> than USA, the use of transformer-less sets is discouraged
> COMPLETELY. While some may build death traps, their design should
> not be promoted on public lists such as Regenrx.
>
> Les
>

>

27482. Re: [regenrx] Re: regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-13 17:45:36 UTC
From: Leonard Meek
Topic: 27454 Message: 27482

I'm with you, Don. I grew up with AC/DC stuff and I learned early on where the high voltages were. If anyone is prone to blindly grabbing wires and is worried about electrocution, perhaps they should take up a different hobby. Even a transformer powered set has "hot" power leads running through it to the switch and primary winding. I've been zapped more often on these sets that on AC/DC sets.

Leonard

----- Original Message -----
From: dulmagedon@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Sunday, November 13, 2016 12:09 AM
Subject: [regenrx] Re: regen superhet

Name one person who was electrocuted from a AC Dc set. on 110 120 mains. I have known none ever and I have known a lot of people. Well over 1000. Millions and millions were built and used. Everyday we use stuff plugged in to main directly , some plastic which gives added protection and some metal , especially in the past. 50sand 60s. I asked my Dad once when I was preteens . He said if you were in the bathtub and someone threw the radio in it would be dangerous. (same would apply to an electric drill BTW or a lamp) James Millllen worte a whole one page article on the subject in QST in the 1930s I have ithere and read it through last year. HOWEVER if you wish not to do that I have no problem with that either and I'll not be eating any casaroles either. ;>) I myself do not like hi power rigs like linear amps a such because I don't like being around that much voltage. The fact that there is a transformer involved gives me no comfort whatever. in fact i fail to see how that gives protection. Now if you are on a 220volt mais system then I would be nervous too and while I could steal that here from the clothes dryer or welder plug direct I won't. BUT on my rigs so powered you cannot touch them when running and they are built on wood not metal and that includes my PSUs My twin 811A linear and all these longfellow txs . And my PSUs are fused near minimums. Best protection transformer or transformerless is don't touch it and leave nothing exposed. Shunt feed also goes a long way and is used here .
donVe3LYX

27483. Re: [regenrx] Re: regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-13 21:34:42 UTC
From: Richard
Topic: 27454 Message: 27483

Yes. The only difference between ac/dc and a transformer is the magnitude of short-circuit current. If you short the ac line the house system can supply several hundred to several thousand amps and you get a big spark. Short a transformer and the current is limited by the size and impedance of the transformer to a few amps, and not much spark. This is a distinction without a difference as it only takes a milliamperes to kill you. One can argue that ac/dc is safer because the voltages are lower. The only real hazard is the hot chassis problem, and with polarized plugs it goes away.

Richard, AA1P

On 11/13/2016 12:45 PM, 'Leonard Meek' lemeek@... [regenrx] wrote:
>
> □
>
> *I'm with you, Don. I grew up with AC/DC stuff and I learned early on
> where the high voltages were. If anyone is prone to blindly grabbing
> wires and is worried about electrocution, perhaps they should take up
> a different hobby. Even a transformer powered set has "hot" power
> leads running through it to the switch and primary winding. I've been
> zapped more often on these sets that on AC/DC sets.*
> **
> *Leonard*
> **
>
> ----- Original Message -----
> *From:* dulmagedon@... [regenrx]
> <mailto:dulmagedon@...%20[regenrx]>
> *To:* regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>
> *Sent:* Sunday, November 13, 2016 12:09 AM
> *Subject:* [regenrx] Re: regen superhet
>
> Name one person who was electrocuted from a AC Dc set. on 110 120
> mains. I have known none ever and I have known a lot of people.
> Well over 1000. Millions and millions were built and used.
> Everyday we use stuff plugged in to main directly , some plastic
> which gives added protection and some metal , especially in the
> past. 50sand 60s. I asked my Dad once when I was preteens . He
> said if you were in the bathtub and someone threw the radio in it
> would be dangerous. (same would apply to an electric drill BTW or
> a lamp) James Millllen worte a whole one page article on the
> subject in QST in the 1930s I have ithere and read it through last
> year. HOWEVER if you wish not to do that I have no problem with

> that either and I'll not be eating any casaroles either. ;>) I
> myself do not like hi power rigs like linear amps a such because I
> don't like being around that much voltage. The fact that there is
> a transformer involved gives me no comfort whatever. in fact i
> fail to see how that gives protection. Now if you are on a 220volt
> mais system then I would be nervous too and while I could steal
> that here from the clothes dryer or welder plug direct I won't.
> BUT on my rigs so powered you cannot touch them when running and
> they are built on wood not metal and that includes my PSUs My twin
> 811A linear and all these longfellow txs . And my PSUs are fused
> near minimums. Best protection transformer or transformerless is
> don't touch it and leave nothing exposed. Shunt feed also goes a
> long way and is used here .
> donVe3LYX
>
>

27484. Re: regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-13 22:06:34 UTC
From: les.au49@...
Topic: 27454 Message: 27484

Hello Don,

I'm more interested in progress with your minimalist superhet than how YOU build YOUR set. Your set will be mainly used by you, and your personal safety is YOUR responsibility. At the same time we all have a responsibility for those around us - remember the parable about the Samaritan and 'neighbour' - and I AM worried about the High School Student who thinks, "Don's gear was transformer-less. I'll copy him." (Especially if the hypothetical student is reading this list and not in YOUR workshop, Don! I'm certain YOU would instruct him (or her) about safety IN YOUR WORKSHOP. But remember my experience - I got a wild-eyed idea about transformer-less power supplies from a book; and it was the personal instruction by Geoff, VK7ZAS - who warned me not to try about this dangerous idea.

I've always had an interest in regen. superhets (whether regenerodyne or the more common "Jones" superhet). and the idea of using beam tetrodes (such as the 12A6/6V6/25L6 (and so on) is very interesting for me.

Returning to your question, Do I know anyone who died from touching a live radio chassis? - no. Ross Hull was electrocuted in the 30s, but he got caught up with the EHT supply in a TV set. The figures give an electrocution rate (for USA) of about 3 deaths by electrocution per million. It's interesting that the death rate in Australia mirrors that in the USA. (I mean death by electrocution.) Over a decade the Australian death rate reported in the coroner's court was 321 persons. So - if I know a million people, only three will die by electrocution - and those mostly from sticking a knife in an electric toaster. But if some-one that I knew died from working on a transformer-less set and I could have saved that life - I wouldn't sleep for weeks, with that knowledge. I would never forgive myself.

About 15% of all deaths (in Australia) over the last decade were due to "low voltage" - and here that is under 600 volts. I read that one safety authority stated: "Remember that your body conducts electrical current, and that an electric shock of 120 volts can often be just as deadly as 600 or more volts."

I DO know that in one very rare case there was a fatality with extra-low voltage. (This is a voltage below 42V. In that case the current found a path in a wound - a cut - that by-passed the (higher resistance) skin and some mA found a path across the chest (and heart). That was a very rare accident - but still a fatality. From EXTRA-low voltage!!

48% of all deaths (by electrocution) in Australia are caused by a failure to follow safe working practise.

I have a nice S-38 (transformer-less) receiver. Ignoring the fact I can't connect this directly to the mains (we run 240V, not 120V) consider this: I got this set came WITHOUT a bakelite knob on the BFO pitch control. If I put an ALUMINIUM knob on this set, it would be a death trap (in USA) simply by reversing the mains plug orientation in the wall. That's the sort of circumstance that creates a fatality. Relatively safe as sold. A potential death-trap now (if I use the Al. knob).

I won't write more about electrical safety. I want to read about your minimalist superhet. I'm so interested in this that I intend to draw up the circuit Prof Coro promotes in his regenerodynes (and post it here). I have already drawn the block diagram, with tables showing frequency for crystals (etc). And I have 'my' version of his design on my work-bench. I used 6AK5 tubes for the mixer and detector (as he suggested) and I used a (fixed) IF frequency of 2025kHz. Not too far from his suggested frequency of 2000kHz!! And I use DC to supply the filaments. 175mA at 12V DC. Easy, easy, easy!! All good advice!! Thank you, amigo Coro!! I'm running David Newkirk's solid state LO circuit. I use a "high-C" circuit for the detector tank. I use powdered iron in the toroids!! Thank you David!! (Ha! I stole the whole design!! Not one original thought!!)

This set performs well. The regeneration control is as smooth as silk! The combination of +36 to +48V DC for the detector and LOTS of "C" in the tank circuit give excellent performance.

Perhaps I shouldn't have mixed two topics in the same posting - safety and receiver design - but I've written my words, and I won't change them now.

All the best.

Les Smith

27485. Re: [regenrx] Re: regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-13 22:06:55 UTC
From: Will Kimber
Topic: 27454 Message: 27485

Hi,

It is not correct that the problem goes away with polarised plug, at least not on DC. If you are unfortunately on the negative live "phase" of the DC the chassis has to be at negative line voltage. i.e. -230v in UK.

You would not believe the number of 230 AC plugs that were incorrectly wired in UK. Strangely some plugs would get "rewired" back the wrong way between service calls!

If the chassis is properly (not always the case) earthed then accidental contact with any metal part should be safe. i.e. grub screw on tuner or volume knob if it breaks. If AC/DC then there could be a problem unless shafts are plastic.

There certainly have been deaths in UK due to AC/DC sets. The reason US selected 110 volts is that there is a good chance of surviving. Not so with 230 volts.

Cheers,

William

On 11/14/2016 10:34 AM, Richard brunneraa1p@... [regenrx] wrote:
>
> Yes. The only difference between ac/dc and a transformer is the
> magnitude of short-circuit current. If you short the ac line the
> house system can supply several hundred to several thousand amps and
> you get a big spark. Short a transformer and the current is limited
> by the size and impedance of the transformer to a few amps, and not
> much spark. This is a distinction without a difference as it only
> takes a milliamperes to kill you. One can argue that ac/dc is safer
> because the voltages are lower. The only real hazard is the hot
> chassis problem, and with polarized plugs it goes away.
>
> Richard, AA1P
>
>
>

27486. Re: [regenrx] Re: regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-13 22:15:56 UTC
From: Leonard Meek
Topic: 27454 Message: 27486

My bench circuit is on a 15A breaker, and all of my "creations" are fused at rarely more than 1/2A. I use IEC connectors on my sets with the ground pin connected to the chassis. On most of my xfmr-less sets I include a safety relay that won't apply power if the chassis is not grounded or the AC receptacle is wired backwards. I personally wired all the recptacles in my house so I know they're wired right, but, I can't speak for anyone who might borrow one of my radios. One of he only "hot chassis" sets I have is a little all metal 3 tube Arvin that I've had since I was about 12 years old, and it has never zapped me. I also have a couple of S-38's that have behaved just as well.

Leonard
----- Original Message -----
From: Richard brunneraa1p@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Sunday, November 13, 2016 11:34 AM
Subject: Re: [regenrx] Re: regen superhet

Yes. The only difference between ac/dc and a transformer is the magnitude of short-circuit current. If you short the ac line the house system can supply several hundred to several thousand amps and you get a big spark. Short a transformer and the current is limited by the size and impedance of the transformer to a few amps, and not much spark. This is a distinction without a difference as it only takes a milliamperes to kill you. One can argue that ac/dc is safer because the voltages are lower. The only real hazard is the hot chassis problem, and with polarized plugs it goes away.

Richard, AA1P

On 11/13/2016 12:45 PM, 'Leonard Meek' lemeek@hawaiiantel.net [regenrx] wrote:

☐

I'm with you, Don. I grew up with AC/DC stuff and I learned early on where the high voltages were. If anyone is prone to blindly grabbing wires and is worried about electrocution, perhaps they should take up a different hobby. Even a transformer powered set has "hot" power leads running through it to the switch and primary winding. I've been zapped more often on these sets that on AC/DC sets.

Leonard

----- Original Message -----
From: dulmagedon@yahoo.ca [regenrx]
To: regenrx@yahoogroups.com
Sent: Sunday, November 13, 2016 12:09 AM
Subject: [regenrx] Re: regen superhet

Name one person who was electrocuted from a AC Dc set. on 110 120 mains. I have known none ever and I have known a lot of people. Well over 1000. Millions and millions were built and used. Everyday we use stuff plugged in to main directly , some plastic which gives added

protection and some metal , especially in the past. 50sand 60s. I asked my Dad once when I was preteens . He said if you were in the bathtub and someone threw the radio in it would be dangerous. (same would apply to an electric drill BTW or a lamp) James Millllen worte a whole one page article on the subject in QST in the 1930s I have ithere and read it through last year. HOWEVER if you wish not to do that I have no problem with that either and I'll not be eating any casaroles either. ;>) I myself do not like hi power rigs like linear amps a such because I don't like being around that much voltage. The fact that there is a transformer involved gives me no comfort whatever. in fact i fail to see how that gives protection. Now if you are on a 220volt mais system then I would be nervous too and while I could steal that here from the clothes dryer or welder plug direct I won't. BUT on my rigs so powered you cannot touch them when running and they are built on wood not metal and that includes my PSUs My twin 811A linear and all these longfellow txs . And my PSUs are fused near minimums. Best protection transformer or transformerless is don't touch it and leave nothing exposed. Shunt feed also goes a long way and is used here .
donVe3LYX

27487. Re: [regenrx] Re: regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-13 22:27:25 UTC
From: Leonard Meek
Topic: 27454 Message: 27487

I think anyone working around electricity must know that it can be dangerous. It's important to know the difference between the "hot" and the neutral leads, and the function of the ground circuit. A good understanding of Ohm's Law doesn't hurt either.

Leonard

----- Original Message -----
From: les.au49@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Sunday, November 13, 2016 12:06 PM
Subject: [regenrx] Re: regen superhet

Hello Don,

I'm more interested in progress with your minimalist superhet than how YOU build YOUR set. Your set will be mainly used by you, and your personal safety is YOUR responsibility. At the same time we all have a responsibility for those around us - remember the parable about the Samaritan and 'neighbour' - and I AM worried about the High School Student who thinks, "Don's gear was transformer-less. I'll copy him." (Especially if the hypothetical student is reading this list and not in YOUR workshop, Don! I'm certain YOU would instruct him (or her) about safety IN YOUR WORKSHOP. But remember my experience - I got a wild-eyed idea about transformer-less power supplies from a book; and it was the personal instruction by Geoff, VK7ZAS - who warned me not to try about this dangerous idea.

I've always had an interest in regen. superhets (whether regenerodyne or the more common "Jones" superhet). and the idea of using beam tetrodes (such as the 12A6/6V6/25L6 (and so on) is very interesting for me.

Returning to your question, Do I know anyone who died from touching a live radio chassis? - no. Ross Hull was electrocuted in the 30s, but he got caught up with the EHT supply in a TV set. The figures give an electrocution rate (for USA) of about 3 deaths by electrocution per million. It's interesting that the death rate in Australia mirrors that in the USA. (I mean death by electrocution.) Over a decade the Australian death rate reported in the coroner's court was 321 persons. So - if I know a million people, only three will die by electrocution - and those mostly from sticking a knife in an electric toaster. But if some-one that I knew died from working on a transformer-less set and I could have saved that life - I wouldn't sleep for weeks, with that knowledge. I would never forgive myself.

About 15% of all deaths (in Australia) over the last decade were due to "low voltage" - and here that is under 600 volts. I read that one safety authority stated: "Remember that your body conducts electrical current, and that an electric shock of 120 volts can often be just as deadly as 600 or more volts."

I DO know that in one very rare case there was a fatality with extra-low voltage. (This is a voltage below 42V. In that case the current found a path in a wound - a cut - that by-passed the (higher resistance) skin and some mA found a path across the chest (and heart). That was a very rare accident - but still a fatality. From EXTRA-low voltage!!

48% of all deaths (by electrocution) in Australia are caused by a failure to follow safe working practise.

I have a nice S-38 (transformer-less) receiver. Ignoring the fact I can't connect this directly to the mains (we run 240V, not 120V) consider this: I got this set came WITHOUT a bakelite knob on the BFO pitch control. If I put an ALUMINIUM knob on this set, it would be a death trap (in USA) simply by reversing the mains plug orientation in the wall. That's the sort of circumstance that creates a fatality. Relatively safe as sold. A potential death-trap now (if I use the Al. knob).

I won't write more about electrical safety. I want to read about your minimalist superhet. I'm so interested in this that I intend to draw up the circuit Prof Coro promotes in his regenerodynes (and post it here). I have already drawn the block diagram, with tables showing frequency for crystals (etc). And I have 'my' version of his design on my work-bench. I used 6AK5 tubes for the mixer and detector (as he suggested) and I used a (fixed) IF frequency of 2025kHz. Not too far from his suggested frequency of 2000kHz!! And I use DC to supply the filaments. 175mA at 12V DC. Easy, easy, easy!! All good advice!! Thank you, amigo Coro!! I'm running David Newkirk's solid state LO circuit. I use a "high-C" circuit for the detector tank. I use powdered iron in the toroids!! Thank you David!! (Ha! I stole the whole design!! Not one original thought!!)

This set performs well. The regeneration control is as smooth as silk! The combination of +36 to +48V DC for the detector and LOTS of "C" in the tank circuit give excellent performance.

Perhaps I shouldn't have mixed two topics in the same posting - safety and receiver design - but I've written my words, and I won't change them now.

All the best.

Les Smith

27488. Re: regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-13 22:28:54 UTC
From: dulmagedon@...
Topic: 27454 Message: 27488

Yeah I am not going to say anymore about it .
The regen superhet is coming along well. I have to build the PSU and decide which variable cap to use . Need to buy a DTSP switch.
don

27489. Re: regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-14 00:16:58 UTC
From: les.au49@...
Topic: 27454 Message: 27489

Hello Arnie,

I read your posting about how to suppress HASH with interest.
It may be my plan to do this will fail.
In short, I want to make a separate unit containing power supply, audio amplifier and speaker.

I have an aluminium box. My plan: to fit 'feed-thru' caps and suppression chokes to the cables in and out.
Now I read that I must use a steel box - not aluminium. Ouch!!

I thought (according to Gauss' law) that I would get a relatively quiet power source.
I'll let you know how my experiment goes when I have it working.

Les

27490. About the 6AK5/5654/6ZHE1P vacuum tubes for regenerative detectors

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-14 00:50:16 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27490 Message: 27490

Dear amigos... have tested many 7 pins and 9 pins miniature vacuum tubes in my ¨classic¨ Hartley regenerative detector using screen grid voltage control...But because the 6AK5's and the Russian clones are so plentiful here, I have stayed using them .

High C tuned circuit for the detector is also a good idea... Operating between 2000 and 2500 kiloHertz for the regenerodyne , I find that during the daytime no signals leak into the detector, and at night , even with poor shielding of the detector , the presence of unwanted feedtrough signals is negligible....!!!! You can also make it tune from 2000 to 3000 to cover an exact one megaHertz segment (a la Collins 51J3 and 51J4 receivers)

You do need more current available for the detector filament and the first audio stage of the 2 stage amplifier that I prefer over the original ECL82/6BM8 of my early regenerodyne.

The latest version soon to be assembled uses a 6AK5 RF amplifier in grounded grid configuration, a 6AK5 mixer , driven from another 6AK5 as crystal controlled oscillator... The mixer output feeds the 6AK5 regenerative detector... The audio module uses a 6AU6 with DC on the filaments, and a 6AQ5 or EL84 according to what tube type is available.

This new regenerodyne will be built in a steel chassis and the power supply is on a separate chassis... well regulated B plus for the regenerative detector from a classic 105 volts gas discharge regulator... OR, as I have tried done many times, connecting three or four Russian 12 volts or 15 volts zener diodes in series to obtain 36/48 volts or 45/60 volts regulated.

The filament voltage when well filtered and regulated does help to reduce HUM ...

The audio output transformers that I have used have the proper impedance for the power output tubes used and have secondaries for 4 and 8 ohms.

My regenerodyne works fine from the LOWFER beacons band, the AM broadcast band all the way up to the 50 mHz or 6 meters band... For the higher bands I have tested using computer clock modules... for example a 48 mHz CPU clock module makes possible to do the conversion from 50 mHz down to 2 mHz, and the tuning range of the detector allows reception from 50.000 to 50.500... It makes a nice receiver to be kept on 50.110 or 50.125 to monitor band openings during the two equinoctial Trans Equatorial Propagation seasons...

73 and DX

Arnie Coro CO2KK

I'm so interested in this that I intend to draw up the circuit Prof Coro promotes in his regenerodynes (and post it here). I have already drawn the block diagram, with tables showing frequency for crystals (etc). And I have 'my' version of his design on my work-bench. I used 6AK5 tubes for the mixer and detector (as he suggested) and I used a (fixed) IF frequency of 2025kHz. Not too far from his suggested frequency of 2000kHz!! And I use DC to supply the filaments. 175mA at 12V DC. Easy, easy, easy!! All good advice!! Thank you, amigo Coro!! I'm running David Newkirk's solid state LO circuit. I use a "high-C" circuit for the detector tank. I use powdered iron in the toroids!! Thank you David!! (Ha! I stole the whole design!! Not one original thought!!)

27491. Re: regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-14 01:26:14 UTC
From: dulmagedon@...
Topic: 27454 Message: 27491

I am just entering this field of interest and have no guarantee of success. I want to explore several things. Just free building at the moment. Always very interesting. Might work or might not. That's Ok I always learn something. The circuit at the moment seems too simple. like I am missing something. I dont hve a 5 mhzcrystal but I did find some 4,8 and 4.3 mhz which will allow me to test. If it is good I will have to twist Bry arm for some new rocks. I enjoy doing this type of stuff. Very peacefull and satisfying.
donVe3LYX

27492. Re: [regenrx] Re: regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-14 02:40:32 UTC
From: Jedwardsat1
Topic: 27454 Message: 27492

I don't have a concrete plan for filtering the B+ but I do have an idea. The usual approach to filtering harmonics is a five pole pi filter as seen on many solid state transmitters. If I make one with a cut off frequency at about 20 KHz, the loss should be pretty high when you get to RF.

Ed AE7TE

Sent from my Samsung Smart Phone

-------- Original message --------
Subject: Re: [regenrx] Re: regen superhet
From: "les.au49@yahoo.com [regenrx]" <regenrx@yahoogroups.com>
To: regenrx@yahoogroups.com
CC:

Hello Ed,

(I'm off the main topic now - Regen superhet - so please excuse me.)

I have a 12V to B+ converter here - it's noisy. It makes a LOT of hash!
I want to use it with my regen detector.
At the moment I'm running +36V DC on the B+ line - according to Prof Coro's experience.
I'll have to find a way to filter the noise - and I'll be interested to hear (or read) your experience in filtering. I paid $10 for it. It will supply any voltage from +45V to +180V, at 5 watts, by changing the "program" resistor.

Les

27493. Switch Mode Tube Supplies

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-14 06:39:58 UTC
From: J Ed
Topic: 27493 Message: 27493

I feel like this deserves its own thread.

I have some switch mode converters from Ebay. One is a buck converter and the other is a boost converter, both capable of a decent amount of power. I intend to run them both from a 12v battery...the buck converter will output 6.3v and the boost will have an adjustable output from 140-390v. This will lead me run a wide array of tube circuits.

The problem will be filtering out harmonics. I intend to place a five section pi filter in the power supply chassis. This should reduce harmonics in the RF band by at least 40 dB. A simple tube receiver can use this supply easily, as long as I could tackle the harmonic interference.

Filtering in a separate chassis or in the power cabling would help, too. Switching noise can be hard to tame but it's not impossible.

I placed the modules in a 9x5 Hammond chassis tonight. After spending a bit figuring out how to make standoffs, I used some PVC grommets that fit 4-40 screws perfectly. I may place some tape on the chassis under the modules to prevent arcing.

Ed AE7TE

27494. Re: regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-14 07:53:34 UTC
From: les.au49@...
Topic: 27454 Message: 27494

Hello Don,

I looked on QRZ-dot-com and saw your address.
If you tell me it's correct, I'll send some 5.000MHz crystals. HC49U or HC49U (short).
Also, I have some 11MHz rocks if that will help.

Let me know. Post from AU to Canada should be about 10 days.
I'm confident your set WILL work. You have the right balance of curiosity, stick-at-it and experience in how to think (from - I presume - your time with engines).

Les

---In regenrx@yahoogroups.com, <dulmagedon@...> wrote :

I am just entering this field of interest and have no guarantee of success. I want to explore several things. Just free building at the moment. Always very interesting. Might work or might not. That's Ok I always learn something. The circuit at the moment seems too simple. like I am missing something. I dont hve a 5 mhzcrystal but I did find some 4,8 and 4.3 mhz which will allow me to test. If it is good I will have to twist Bry arm for some new rocks. I enjoy doing this type of stuff. Very peacefull and satisfying.
donVe3LYX

27495. Re: regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-14 12:42:59 UTC
From: dulmagedon@...
Topic: 27454 Message: 27495

It is now. I see I need to do some updating. I took care of the address just now.
Wow, I never thought of the why. You might be right. I had some great adventures in the engine business. Nothing like running against a big fuel injected V8 dragster of similar weight with a slant six handmade manifold you own cam design and hand built car. Since The crash in sept 2014 and fractured spine I had to change modes. (I was too old anyway for an open wheeled car.) Ham radio was a great way to occupy my time while I recovered. Probably you are correct. I hadn't thought about it.
donVe3LYX

27496. Re: [regenrx] Switch Mode Tube Supplies

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-14 16:11:33 UTC
From: Robert Nickels
Topic: 27493 Message: 27496

On 11/14/2016 12:39 AM, J Ed jedwardsat1@... [regenrx] wrote:
> The problem will be filtering out harmonics. I intend to place a five
> section pi filter in the power supply chassis. This should reduce
> harmonics in the RF band by at least 40 dB.

Ed, I think you'll find that you can easily get that much attenuation with a simple 2 or 3 order LPF with an inductor as small as 1mH. At least that's been my experience, but a few minutes with Elsie could save you some build time and parts. It's a good idea to bypass the supply input as well to minimize any conducted emissions on those lines.

73, Bob W9RAN

27497. Re: [regenrx] Re: regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-14 20:25:43 UTC
From: Charles Moizeau
Topic: 27454 Message: 27497

This may be apocryphal, but as a youngster (age nine or so when I was beginning to do this stuff) I learned of a suicide that was successfully achieved when the person abraded the inner sides of his wrists, put salt on the slight wounds, then achieved his goal with leads from a husky 22.5 Volt dry cell.

It scared the dickens out of me at the time and has obviously remained in my memory.

Charles

From: regenrx@yahoogroups.com <regenrx@yahoogroups.com> on behalf of Richard brunneraa1p@comcast.net [regenrx] <regenrx@yahoogroups.com>
Sent: Sunday, November 13, 2016 4:34 PM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Re: regen superhet

Yes. The only difference between ac/dc and a transformer is the magnitude of short-circuit current. If you short the ac line the house system can supply several hundred to several thousand amps and you get a big spark. Short a transformer and the current is limited by the size and impedance of the transformer to a few amps, and not much spark. This is a distinction without a difference as it only takes a milliamperes to kill you. One can argue that ac/dc is safer because the voltages are lower. The only real hazard is the hot chassis problem, and with polarized plugs it goes away.

Richard, AA1P

On 11/13/2016 12:45 PM, 'Leonard Meek' lemeek@hawaiiantel.net<mailto:lemeek@hawaiiantel.net> [regenrx] wrote:

☐

I'm with you, Don. I grew up with AC/DC stuff and I learned early on where the high voltages were. If anyone is prone to blindly grabbing wires and is worried about electrocution, perhaps they should take up a different hobby. Even a transformer powered set has "hot" power leads running through it to the switch and primary winding. I've been zapped more often on these sets that on AC/DC sets.

Leonard

----- Original Message -----
From: dulmagedon@yahoo.ca [regenrx]<mailto:dulmagedon@yahoo.ca%20[regenrx]>
To: regenrx@yahoogroups.com<mailto:regenrx@yahoogroups.com>
Sent: Sunday, November 13, 2016 12:09 AM
Subject: [regenrx] Re: regen superhet

Name one person who was electrocuted from a AC Dc set. on 110 120 mains. I have known none ever and I have known a lot of people. Well over 1000. Millions and millions were built and used. Everyday we use stuff plugged in to main directly , some plastic which gives added

protection and some metal , especially in the past. 50sand 60s. I asked my Dad once when I was preteens . He said if you were in the bathtub and someone threw the radio in it would be dangerous. (same would apply to an electric drill BTW or a lamp) James Millllen worte a whole one page article on the subject in QST in the 1930s I have ithere and read it through last year. HOWEVER if you wish not to do that I have no problem with that either and I'll not be eating any casaroles either. ;>) I myself do not like hi power rigs like linear amps a such because I don't like being around that much voltage. The fact that there is a transformer involved gives me no comfort whatever. in fact i fail to see how that gives protection. Now if you are on a 220volt mais system then I would be nervous too and while I could steal that here from the clothes dryer or welder plug direct I won't. BUT on my rigs so powered you cannot touch them when running and they are built on wood not metal and that includes my PSUs My twin 811A linear and all these longfellow txs . And my PSUs are fused near minimums. Best protection transformer or transformerless is don't touch it and leave nothing exposed. Shunt feed also goes a long way and is used here .
donVe3LYX

27498. Re: regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-14 20:41:02 UTC
From: dulmagedon@...
Topic: 27454 Message: 27498
Attachments: 1 described; binary payloads are missing from this source WARC

So far

27499. RE: [regenrx] Re: regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-14 20:46:04 UTC
From: Larry
Topic: 27454 Message: 27499

Excellent!

Larry

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Monday, November 14, 2016 3:41 PM
To: regenrx@yahoogroups.com
Subject: [regenrx] Re: regen superhet

So far

27500. Re: [regenrx] Re: regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-14 21:09:34 UTC
From: john ruccolo
Topic: 27454 Message: 27500

Bar codes! Very high tech for a regen! ;-)

Sent from my CRM-114

> On Nov 14, 2016, at 3:46 PM, 'Larry' lbeaty@... [regenrx] <regenrx@yahoogroups.com>
wrote:
>
> Excellent!
>
> Larry
>
>
>
> From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
> Sent: Monday, November 14, 2016 3:41 PM
> To: regenrx@yahoogroups.com
> Subject: [regenrx] Re: regen superhet
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>
> So far
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27501. Re: [regenrx] Re: regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-14 22:18:16 UTC
From: dulmagedon@...
Topic: 27454 Message: 27501

I just scrapped them off 5 minutes ago. sri
donVe3LYX

27502. Re: [regenrx] Re: regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-14 22:21:18 UTC
From: john ruccolo
Topic: 27454 Message: 27502

Just kidding! I really like the way you build, Don!

73,

John, KC2UAK

Sent from my CRM-114

> On Nov 14, 2016, at 5:18 PM, dulmagedon@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
> I just scrapped them off 5 minutes ago. sri
> donVe3LYX
>
>

27503. Re: [regenrx] Switch Mode Tube Supplies

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-15 02:08:23 UTC
From: J Ed
Topic: 27493 Message: 27503

Let me clarify, because "RF band" is a very broad statement.

Say we have a switcher that uses a frequency of 30 KHz. The lowest amateur band, 3500 KHz, is more than 100 times the frequency (I believe this is two decades). Designing a 40 dB/decade filter shouldn't be hard.

The thing to remember is that the harmonic signals won't ever be gone. The best I can do for receiver work is to reduce them lower than the strength of the signals I hope to receiver. For a broadcast receiver, this wouldn't be as hard as for an amateur receiver.

Per your suggestion, I'll play around with Elsie and see where it takes me.

Ed AE7TE

On Mon, Nov 14, 2016 at 8:11 AM, Robert Nickels w9ran@... [regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> On 11/14/2016 12:39 AM, J Ed jedwardsat1@... [regenrx] wrote:
> > The problem will be filtering out harmonics. I intend to place a five
> > section pi filter in the power supply chassis. This should reduce
> > harmonics in the RF band by at least 40 dB.
>
> Ed, I think you'll find that you can easily get that much attenuation
> with a simple 2 or 3 order LPF with an inductor as small as 1mH. At
> least that's been my experience, but a few minutes with Elsie could save
> you some build time and parts. It's a good idea to bypass the supply
> input as well to minimize any conducted emissions on those lines.
>
> 73, Bob W9RAN
>
>
>

27504. Re: [regenrx] Switch Mode Tube Supplies

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-15 11:53:53 UTC
From: Bill Cromwell
Topic: 27493 Message: 27504

Hi Ed,

The lowest frequency amateur band is at 472 kc, This apparently will be allocated eventually in the USA, too. Presently in the USA the lowest frequency amateur band is 160 meters at 1. 8 mc. Although not allocated in the amateur bands there are stations at much lower frequencies and we wouldn't want our power supplies to interfere with our operations there.

I have been able to see improvements in the background noise levels in my receivers when I turn off *all* of the switch mode power supplies in my shack - including the computers I use for digital modes and for DSP processing on otherwise 'legacy' equipment. There have been *no* exceptions. I use brute force 'linear' power supplies or even better - batteries when I can. Try operating on battery power when the power grid goes down in your area. The results are 'illuminating'.

73,

Bill KU8H

On 11/14/2016 09:08 PM, J Ed jedwardsat1@... [regenrx] wrote:
> Let me clarify, because "RF band" is a very broad statement.
>
> Say we have a switcher that uses a frequency of 30 KHz. The lowest
> amateur band, 3500 KHz, is more than 100 times the frequency (I
> believe this is two decades). Designing a 40 dB/decade filter
> shouldn't be hard.
>
> The thing to remember is that the harmonic signals won't ever be gone.
> The best I can do for receiver work is to reduce them lower than the
> strength of the signals I hope to receiver. For a broadcast receiver,
> this wouldn't be as hard as for an amateur receiver.
>
> Per your suggestion, I'll play around with Elsie and see where it
> takes me.
>
> Ed AE7TE
>
> On Mon, Nov 14, 2016 at 8:11 AM, Robert Nickels w9ran@...
> <mailto:w9ran@...> [regenrx] <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>> wrote:
>
> On 11/14/2016 12:39 AM, J Ed jedwardsat1@...
> <mailto:jedwardsat1@...> [regenrx] wrote:
> > > The problem will be filtering out harmonics. I intend to place a
> five

> > section pi filter in the power supply chassis. This should reduce
> > harmonics in the RF band by at least 40 dB.
>
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> least that's been my experience, but a few minutes with Elsie
> could save
> you some build time and parts. It's a good idea to bypass the supply
> input as well to minimize any conducted emissions on those lines.
>
> 73, Bob W9RAN
>
>
>

--
bark less - wag more

27505. Re: [regenrx] Switch Mode Tube Supplies

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-15 12:14:43 UTC
From: dulmagedon@...
Topic: 27493 Message: 27505

Actually there are several US stations already on "Permission" license on 472 (630M). For us it is already permissable. We were told to give way to commercial traffic. There was just a two day event on 630m (472) this past weekend. However a PSU is not a transmitter and it should not be that hard to ensure it doesn't leak RF. So I think.
donVE3LYX

27506. Re: [regenrx] Switch Mode Tube Supplies

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-16 13:32:25 UTC
From: Bill Cromwell
Topic: 27493 Message: 27506

Hi Don,

They put plenty of hash into receivers sitting a few inches to a few feet away. That is the digital, switch-mode power supplies. The hash is radiated and/or conducted into the receivers. That was the whole point of the original post as I understood it. When I want to hear truly weak signals the computers and other digital futz MUST be unpowered (unplugged). For more casual use they can be used as part of the system. I haven't used *every* device on the planet but have not found any switch mode supplies or computers that are *dead* quiet. I have made some of them less offensive but not completely clean.

I'm standing my ground on this.

73,

Bill KU8H

On 11/15/2016 07:14 AM, dulmagedon@... [regenrx] wrote:
>
> Actually there are several US stations already on "Permission" license
> on 472 (630M). For us it is already permissable. We were told to give
> way to commercial traffic. There was just a two day event on 630m
> (472) this past weekend. However a PSU is not a transmitter and it
> should not be that hard to ensure it doesn't leak RF. So I think.
> donVE3LYX
>
>

--
bark less - wag more

27507. new parasite copy

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-16 13:49:16 UTC
From: William Wood
Topic: 27507 Message: 27507

http://www.qrpguys.com

Just learned of the site this morning
from Paul W0RW in the Paraset
Builder's Group. If you've followed
Doug Hendricks KI6DX and some of
the guys that work with him you'll know
they've had some great stough over
the years… Drop down menus on
their site will bring you Schematics and
building instructions.

Thought one of you on board here may
enjoy the site.

73 fer now
Bill KE9XQ

27508. Re: [regenrx] Switch Mode Tube Supplies

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-16 14:02:43 UTC
From: dulmagedon@...
Topic: 27493 Message: 27508

I would NEVER object to anyone standing their ground as you know;>) I couldn't!
So in making them better what did you find that helped? I have some 300 watt inverters I would like to use in place of my vib supplies . They are very dirty. I had thought of canning them in a metal enclosure to see if that would help.
donVe3LYX

27509. Re: [regenrx] Switch Mode Tube Supplies

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-16 23:53:02 UTC
From: Bill Cromwell
Topic: 27493 Message: 27509

Hi Don,

I started by looking at the filters that are supposed to be on the AC line into the computer powers supplies. I installed missing filters, missing filter sections or reinforced the filtering. I added similar filtering on the output (DC) side but things like the inductors can get *large* for high current power supplies. The metal shielding helps too and I have done some of that. We have to make sure the metal pieces are well connected and then grounded. Aluminum foil as sold for use in the kitchen is awfully fragile and I had better luck using the heavier foil that is sold full of frozen lasagna and other such goodies. It is more durable and workable which helps maintain the electrical bonding once you have put it together.

Cables sometimes benefit from ferrite materials (sometimes not). Do what you can about those. Much of the time it has been difficult trying to determine the source of the hash so what works on one power supply might have no effect at all on another.

Meanwhile, I still get the best results using batteries and unplugging the digital/switching supplies. With stronger signals (and there are plenty) the 'hash' might not be troublesome or not noticeable in some parts of the radio spectrum. I have found batteries practical on tube heater circuits and for plate B+ supplies in receivers and low power transmitters (up to about 6 tubes) and a watt or two of RF power. That is NOT inverters, multivibrators, etc to change a 9 or 12 volt battery to 180 volts DC. It is DC straight from the batteries in series stacks.

There are other things I have seen on the internet but not tried. As usual - your mileage may vary.

73,

Bill KU8H

On 11/16/2016 09:02 AM, dulmagedon@... [regenrx] wrote:
>
> I would NEVER object to anyone standing their ground as you know;>) I
> couldn't!
> So in making them better what did you find that helped? I have some
> 300 watt inverters I would like to use in place of my vib supplies .
> They are very dirty. I had thought of canning them in a metal
> enclosure to see if that would help.
> donVe3LYX
>
>
> --

27510. Re: [regenrx] Switch Mode Tube Supplies

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-17 03:00:33 UTC
From: dulmagedon@...
Topic: 27493 Message: 27510

Thanks. Good info.
Fired up the supethet regen det today. Results were less then steller. I think I will rebuild as per the handbook original and work back in this direction afterwards.
donVe3LYX

27511. Re: [regenrx] Switch Mode Tube Supplies

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-17 12:34:10 UTC
From: Bill Cromwell
Topic: 27493 Message: 27511

Heh,

Some of the stuff I try doesn't work very well either (or maybe not at all). Most of the materials can be recycled into other projects (unless smoke is involved). Good luck with your regen/superhet.

I'm looking at the parts for one that uses battery tubes like the 1S4. I have several designs here that use two or three tubes with different 'architecture'. I'll see if I can transplant the most favorable bits from each and put them together in one radio.

73,

Bill KU8H

On 11/16/2016 10:00 PM, dulmagedon@... [regenrx] wrote:
>
> Thanks. Good info.
> Fired up the supethet regen det today. Results were less then steller.
> I think I will rebuild as per the handbook original and work back in
> this direction afterwards.
> donVe3LYX
>
>

--
bark less - wag more

27512. Re: Switch Mode Tube Supplies

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-17 19:22:00 UTC
From: b_weeber@...
Topic: 27493 Message: 27512

I went a different way. The converter is running from a 12V battery, frequencies between 100-300 Hz are no problem. The voltage has to be filtered properly. To do this, the inductivity is very helpful, because with 200Hz the ears are already getting sensitive.

http://www.b-weeber.de/bilder/Wechselrichter/Wandler_mit_getrenntem_Multivibrator.gif
http://www.b-weeber.de/bilder/Wechselrichter/Wandler_mit_getrenntem_Multivibrator.gif

http://www.b-weeber.de/bilder/Wechselrichter/Wandler_mit_getrenntem_Multivibrator.gif

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View on www.b-weeber.de
http://www.b-weeber.de/bilder/Wechselrichter/Wandler_mit_getrenntem_Multivibrator.gif
Preview by Yahoo

I know about somebody, who used an integrated circuit for car radios. Input signal was a sine wave, the ampifier output was feeded into a transormer 12V/230V. This way the signal is completely free from any noise.

27513. Re: [regenrx] Re: Switch Mode Tube Supplies

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-17 20:49:08 UTC
From: msalbert@...
Topic: 27493 Message: 27513

Hello, thanks for posting your converter information. Very interesting! Would you mind some questions? What is the 24 V line connected to the output rectifier? Seems like it is standing the output voltage on top of the battery? What is the purpose of diode D9 connected to the 155v pass transistor emitter? Regards, Mark KB9VKE -----Original Message----- From: b_weeber@yahoo.com [regenrx] To: regenrx Sent: Thu, Nov 17, 2016 01:22 PM Subject: [regenrx] Re: Switch Mode Tube Supplies

I went a different way. The converter is running from a 12V battery, frequencies between 100-300 Hz are no problem. The voltage has to be filtered properly. To do this, the inductivity is very helpful, because with 200Hz the ears are already getting sensitive. http://www.b-weeber.de/bilder/Wechselrichter/Wandler_mit_getrenntem_Multivibrator.gif

(http://www.b-weeber.de/bilder/Wechselrichter/Wandler_mit_getrenntem_Multivibrator.gif)

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View on (http://www.b-weeber.de/bilder/Wechselrichter/Wandler_mit_getrenntem_Multivibrator.gif)www.b-weeber.de (http://www.b-weeber.de)

Preview by Yahoo

I know about somebody, who used an integrated circuit for car radios. Input signal was a sine wave, the ampifier output was feeded into a transormer 12V/230V. This way the signal is completely free from any noise.

27514. Re: [regenrx] Switch Mode Tube Supplies

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-17 23:10:27 UTC
From: dulmagedon@...
Topic: 27493 Message: 27514

I haven't written it off. But it does need some rethink. However to be flat out honest I just bought Collins station and may be somewhat distracted trying to get it up and running Never thought I would own one. It is just a poorboy set up TCS but tis enough for me. Once the dust settles I get back to it. Also have to be ready for the BK event which is not far away. I want to use a Regen for most of it.
I have recycled a few here to. You know the ones that did work but were sort of ho hum and not really too practical. Anyway still a great hobby.
donVE3LYX

27515. Re: Switch Mode Tube Supplies

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-17 23:26:40 UTC
From: b_weeber@...
Topic: 27493 Message: 27515

** What is the 24 V line connected to the output rectifier?
** Seems like it is standing the output voltage on top of the battery?

The wires a and b are showing a square wave signal with a maximum of double voltage of the battery. Without D1 and D2 and without snubber, there is an overshooting up to 80-100 Volts. So the two diodes are rectifying the square wave voltage, but are also removing the overshooting. At this point i thought, why not improving the efficiency and adding the output voltage on top of the 24V.

- The 250-270 Volts are used for a small transmitter pa 2-4Watts and the stabilized 155Volts for receive and the transmitter oscillator.

- D9 is protecting the transistor, if the 155 Volts are decreasing slower, than the base voltage.

- My output power measures ~15 Watts. The power could easily be increased just by changing to a larger transformer. Above 15 Watts the MOS-FETs should be mounted on a heat sink. Don't forget the isolation.

- Increasing the frequency to 200-300 Hz doesn't make any trouble nor anything is getting too hot. A smaller core is neccessary, to transform the same amount of power and former 6V or 9V secundary windings can be used with 12Volts. In my case the biggest losses are caused by the copper resistance of the 2 x 9V coils. So it makes sense, to look for a transformer with a low coil resistance.

- It makes a little bit effort, to choose the right transformer. The primary / secundary turns ratio can be measured, when the transformer is running without load. The voltage is typically about 10% higher compared to the value told in the data sheet. If now the transformer is turned upside down (secundary <> primary), the opposite is the case. And don't forget the additional 24 Volts. If this is done wrong, then one might end up with a completely wrong voltage.

27517. BJT detector blocks for using in any regenerative receiver.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-18 11:37:04 UTC
From: dawmast@...
Topic: 27517 Message: 27517

In the Desert Rat II receiver the diode detector D4, D5 is preceded by an emitter follower Q3 which acts as a buffer stage between the tank circuit and diode detector. I see that base bias resistor R6 has a rather low value of 10k, which unnecessarily loads the tank circuit. And there isn't any base stopper resistor which prevents parasitic oscillations of the emitter follower stage. Advantage of using a diode detector that it makes regeneration control more smoothly. When the signal from the tank circuit increases, D4 and D5 conduct more, decreasing its input impedance of the full-wave detector. The input impedance of Q3 is Hfe * Rl, Rl is decreased that means that the input impedance of Q3 is also reduced. The Q-Multiplier is more damped, making the oscillations weaker and hence the regeneration control more smoothly. See "Regenerative Receiver Design Blocks" at http://hubpages.com/technology/Regenerative-Receiver-Design-Blocks.

http://kearman.com/images/desert-ratt2-rf.png

In the uppermost circuit diagram below I have substituted the full-wave diode rectifier circuit by an emitter follower detector T2 which is biased near cut off. T1 is a bootstrapped buffer stage between tank circuit and detector stage. T1 and T2 form a Darlington pair in which T1 is sufficiently biased by R8.

In the lowermost circuit diagram I still use a full-wave diode detector. But I use silicon diodes 1N4148 here which must be biased by R13 of 100k, otherwise the detector won't function properly.

In both diagrams the base stopper resistor R4, R15 of 220 Ohms are mandatory, otherwise the buffer stages T1, T4 will parasitically oscillate due to the invisible parasitic Colpitts voltage divider.

https://www.uploadarchief.net/files/download/detectorblock.gif
https://www.uploadarchief.net/files/download/detectorblock.gif

27518. Re: [regenrx] Re: Switch Mode Tube Supplies

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-18 16:00:33 UTC
From: msalbert@...
Topic: 27493 Message: 27518

Hello Bernd, thanks for the explanations!
Regards,
Mark KB9VKE

-----Original Message-----
From: b_weeber@... [regenrx] <regenrx@yahoogroups.com>
To: regenrx <regenrx@yahoogroups.com>
Sent: Thu, Nov 17, 2016 5:26 pm
Subject: [regenrx] Re: Switch Mode Tube Supplies

** What is the 24 V line connected to the output rectifier?
** Seems like it is standing the output voltage on top of the battery?

The wires a and b are showing a square wave signal with a maximum of double voltage of the battery. Without D1 and D2 and without snubber, there is an overshooting up to 80-100 Volts. So the two diodes are rectifying the square wave voltage, but are also removing the overshooting. At this point i thought, why not improving the efficiency and adding the output voltage on top of the 24V.

- The 250-270 Volts are used for a small transmitter pa 2-4Watts and the stabilized 155Volts for receive and the transmitter oscillator.

- D9 is protecting the transistor, if the 155 Volts are decreasing slower, than the base voltage.

- My output power measures ~15 Watts. The power could easily be increased just by changing to a larger transformer. Above 15 Watts the MOS-FETs should be mounted on a heat sink. Don't forget the iso lation.

- Increasing the frequency to 200-300 Hz doesn't make any trouble nor anything is getting too hot. A smaller core is neccessary, to transform the same amount of power and former 6V or 9V secundary windings can be used with 12Volts. In my case the biggest losses are caused by the copper resistance of the 2 x 9V coils. So it makes sense, to look for a transformer with a low coil resistance.

- It makes a little bit effort, to choose the right transformer. The primary / secundary turns ratio can be measured, when the transformer is running without load. The voltage is typically about 10% higher compared to the value told in the data sheet. If now the transformer is turned upside down (secundary <> primary), the opposite is the case. And don't forget the additional 24 Volts. If this is done wrong, then one might end up with a completely wrong voltage.

27519. Re: Switch Mode Tube Supplies

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-19 09:02:07 UTC
From: dawmast@...
Topic: 27493 Message: 27519

"I know about somebody, who used an integrated circuit for car radios. Input signal was a sine wave, the ampifier output was feeded into a transormer 12V/230V. This way the signal is completely free from any noise."

But when the power amplifier is switched off, will the primary of the transformer generate a high voltage spike, caused by the self-inductance of the transformer, which will destroy the PA stage? And there should be a feedback circuit to stabilize the voltage at the secondary of the mains transformer.

27520. Re: Switch Mode Tube Supplies

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-19 21:28:24 UTC
From: d29602960@...
Topic: 27493 Message: 27520

Hi everyone,

This is a very interesting thread and after reading the earlier posts on the subject I thought I would share my experiences with switching power supplies. This post may be of most interest to those who want to home-brew a switching PSU.

From early "bad" experiences with switching/switch-mode psu's it seemed like an interesticg challange to try and make a silent switching supply for a regen tranceiver project I was working on at the time (Parset) which is shown here...

http://www.qsl.net/m0ayf/Paraset/M0AYF-Paraset.jpg
http://www.qsl.net/m0ayf/Paraset/M0AYF-Paraset.jpg

The power supply needed to operate from 12 Volts DC and provide around 200 Volts (noise free) and to cut a long story short the project was successful and "silent" though I admit it was noisy on the first testing.

I found the secret to that truly "silent" background was to sacrifice a little efficiency by way of s-l-o-w-i-n-g down the switching waveform slightly. That is to slow the rise/fall time of the switching waveform which is echnicaly very easy to achieve with simple R/C circuits.

I should also confess to operating the switcher at fairly low frequency of around 80 Hz (not critical) as this permits the use of regular mains power transformers found in the junk-box.

The other secret to the silent background was to adopt the sound advice allready offered by Arnie Coro (CO2KK) and to mount the PSU in a steel box to provide both magnetic and electrostatic shielding. Plastic or alloy boxes are no good.

As for the technical detail I would direct you to the following web page and the experiences of Ronald Deckkerand in his quest to build a "silent" 90 Volte plate supply for use with battery valve radios.

Electronic 90V Plate Battery http://www.dos4ever.com/battery/battery.html#signals

http://www.dos4ever.com/battery/battery.html#signals

Electronic 90V Plate Battery http://www.dos4ever.com/battery/battery.html#signals
Contents: Introduction The “Grand Plan” On Power-Inverters and Transformers A Breadboard Test Circuit Measurements A Simple N...

View on www.dos4ever.com http://www.dos4ever.com/battery/battery.html#signals
Preview by Yahoo

Of particular interest is his in-depth explanation of how to reduce or avoid switching noise. The explanations are supported by a host of detailed CRO images and text. Also of interest is a novel circuit for switching on/off both the HT and LT supplies from a single

pole switch.

Regards,

Des (M0AYF)

27521. Re: [regenrx] Re: Switch Mode Tube Supplies

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-19 21:49:26 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27493 Message: 27521

Really silent DC to DC conversion.

Very interesting thread indeed... that made be go into present day really professional totally isolated from the AC power lines systems...

The way things move is clear... You do not generate a square wave, or even a staircase type of waveform...

Professional UPS systems that cost a lot of $$$ generate a very nice looking extremely low distortion SINE WAVE... that is operated at 50 or 60 Hertz depending on the country where you live.

In Cuba we use 60 Hertz AC MAINS:.. so a system intended to provide full time power UPS to for example a DATA CENTER or the MAIN CONTROL of a TV station is designed around a huge battery that is kept fully topped automatically.....many, many amperes...

The battery provides power to the system that consists of the sine wave generator that feeds a huge power amplifier ... The battery has enough storage capacity for maybe 10 or 15 minutes, giving a logical margin for your beautiful No.1 Diesel powered back up generator to start... and it No.1 fails gives time for No.2 Diesel to come into service...

During the time lapse when the Diesel is not charging the huge battery bank... the equipment is kept powered from the same source... so there is NO SWITCHING TRANSIENT:... Your equipment is always receiving its AC power from the huge 60 Hertz ¨ audio amplifier¨.... Usually the system uses not one but two or four power units , two synchronized normally and two ready to step in as required if there is a failure.

No switching transients !!! and if the Diesel's do not start (they provide AC also to the vital airconditioning equipment) then all sorts of alarms start flashing , ringing and shaking so that a hopefully automatic shut down sequence is started.

Now back to the regenerative power unit... you connect your 12 volts battery to a 60 Hz (or 50 Hz) sinusoidal oscillator that feeds a standard transistors power amplifier... that is connected to a standard transformer that feeds the rectifier module... In other words, you go from DC to DC without the dreadful presence of the the square waves of a switched mode power unit...

73 and DX

Arnie Coro CO2KK

On 19/11/16 16:28, d29602960@... [regenrx] wrote:
>

>
> Hi everyone,
>
> This is a very interesting thread and after reading the earlier posts
> on the subject I thought I would share my experiences with switching
> power supplies. This post may be of most interest to those who want to
> home-brew a switching PSU.
>
> From early "bad" experiences with switching/switch-mode psu's it
> seemed like an interesticg challange to try and make a silent
> switching supply for a regen tranceiver project I was working on at
> the time (Parset) which is shown here...
>
> http://www.qsl.net/m0ayf/Paraset/M0AYF-Paraset.jpg
>
> The power supply needed to operate from 12 Volts DC and provide around
> 200 Volts (noise free) and to cut a long story short the project was
> successful and "silent" though I admit it was noisy on the first testing.
>
> I found the secret to that truly "silent" background was to sacrifice
> a little efficiency by way of s-l-o-w-i-n-g down the switching
> waveform slightly. That is to slow the rise/fall time of the switching
> waveform which is echnicaly very easy to achieve with simple R/C circuits.
>
> I should also confess to operating the switcher at fairly low
> frequency of around 80 Hz (not critical) as this permits the use of
> regular mains power transformers found in the junk-box.
>
> The other secret to the silent background was to adopt the sound
> advice allready offered by Arnie Coro (CO2KK) and to mount the PSU in
> a steel box to provide both magnetic and electrostatic shielding.
> Plastic or alloy boxes are no good.
>
> As for the technical detail I would direct you to the following web
> page and the experiences of Ronald Deckkerand in his quest to build a
> "silent" 90 Volte plate supply for use with battery valve radios.
>
> Electronic 90V Plate Battery
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>
> Of particular interest is his in-depth explanation of how to reduce or
> avoid switching noise. The explanations are supported by a host of
> detailed CRO images and text. Also of interest is a novel circuit for
> switching on/off both the HT and LT supplies from a single pole switch.
>
>
> Regards,
>
>
> Des (M0AYF)
>
>
>
>

27522. Regenerative receiver with a product detector.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-20 19:51:31 UTC
From: dawmast@...
Topic: 27522 Message: 27522

A regenerative receiver with a product detector, like this one at
http://hubpages.com/technology/High-Performance-Regen-Receiver
http://hubpages.com/technology/High-Performance-Regen-Receiver "A High-Performance Regenerative Receiver - HiRegen".

Here is a schematic of an autodyne (self oscillating) product detector from Elektuur November 1987.

T1 is the RF preamp. stage while T2 is a synchronised regenerative product detector. Armstrong type RF feedback is via C5, L2b and P2. When T2 is oscillating, the amplified RF signal is taken from the drain of T2 and fed to G2 of T2. This signal is multiplied by the sidebands of the AM RF signal at G1 and the difference product, which is the demodulated AF signal is taken from the source of T2 and fed to an LPF with C13-C15 and L3.

https://www.uploadarchief.net/files/download/dcr_mos.gif
https://www.uploadarchief.net/files/download/dcr_mos.gif

Advantage of using a product detector in a regenerative receiver is the good selectivity, because the difference products of adjacent channels lies out of the audible range in the baseband. An LPF with a corner frequency of 5 kHz at the output of a product detector improves the selectivity. In fact an 'IF filter' at AF. The adjacent channel selectivity of a product detector is not dependent of the resonance curve of the main tank circuit which precedes the detector, unless the product detector does not do envelope detection secretly. If that happens, a strong signal farther away will break through by unwanted envelope detection.

I think that using product detectors in regenerative receivers should be further investigated. In regenerative receivers envelope detectors are usually used.

27523. RE: [regenrx] Regenerative receiver with a product detector.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-21 07:38:16 UTC
From: Hubert Miller
Topic: 27522 Message: 27523

The T2 g2 connected right to the drain, how does that work? g1 gets positive feedback via the coil, but g2 gets negative feedback from the drain. Also i think the g2 DC voltage must be rather higher than

in usual usage? In the text below, is “multiplied” the verb you actually meant to use?

thanks- Hue

T1 is the RF preamp. stage while T2 is a synchronised regenerative product detector. Armstrong type RF feedback is via C5, L2b and P2. When T2 is oscillating, the amplified RF signal is taken from the drain of T2 and fed to G2 of T2. This signal is multiplied by the sidebands of the AM RF signal at G1 and the difference product, which is the demodulated AF signal is taken from the source of T2 and fed to an LPF with C13-C15 and L3.

https://www.uploadarchief.net/files/download/dcr_mos.gif

27524. Re: Switch Mode Tube Supplies

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-22 21:19:22 UTC
From: Bry Carling
Topic: 27493 Message: 27524

OH MY GOSH, Des...

That is some of the most beautiful construction I have ever seen!!!

Did you build that or did someone else?

Bry AF4K (G3XLQ) and (WN4NRR)

Hi everyone,

This is a very interesting thread and after reading the earlier posts on the subject I thought I would share my experiences with switching power supplies. This post may be of most interest to those who want to home-brew a switching PSU.

From early "bad" experiences with switching/switch-mode psu's it seemed like an interesticg challange to try and make a silent switching supply for a regen tranceiver project I was working on at the time (Parset) which is shown here...

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Preview by Yahoo

Of particular interest is his in-depth explanation of how to reduce or avoid switching noise. The explanations are supported by a host of detailed CRO images and text. Also of interest is a novel circuit for switching on/off both the HT and LT supplies from a single pole switch.

Regards,

Des (M0AYF)

[http://www.qsl.net/m0ayf/Paraset/M0AYF-Paraset.jpg]

[http://www.qsl.net/m0ayf/Paraset/M0AYF-Paraset.jpg]

27525. RE: Regenerative receiver with a product detector.

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-23 18:53:47 UTC
From: Bry Carling
Topic: 27522 Message: 27525

To be honest the schematic is so tiny I can;t read anything on it.

Do you have a larger diagram?

Bry AF4K

Posted by: dawmast@... drm1173

A regenerative receiver with a product detector, like this one at
http://hubpages.com/technology/High-Performance-Regen-Receiver
http://hubpages.com/technology/High-Performance-Regen-Receiver "A High-Performance Regenerative Receiver - HiRegen".

Here is a schematic of an autodyne (self oscillating) product detector from Elektuur November 1987.

T1 is the RF preamp. stage while T2 is a synchronised regenerative product detector. Armstrong type RF feedback is via C5, L2b and P2. When T2 is oscillating, the amplified RF signal is taken from the drain of T2 and fed to G2 of T2. This signal is multiplied by the sidebands of the AM RF signal at G1 and the difference product, which is the demodulated AF signal is taken from the source of T2 and fed to an LPF with C13-C15 and L3.

https://www.uploadarchief.net/files/download/dcr_mos.gif
https://www.uploadarchief.net/files/download/dcr_mos.gif

Advantage of using a product detector in a regenerative receiver is the good selectivity, because the difference products of adjacent channels lies out of the audible range in the baseband. An LPF with a corner frequency of 5 kHz at the output of a product detector improves the selectivity. In fact an 'IF filter' at AF. The adjacent channel selectivity of a product detector is not dependent of the resonance curve of the main tank circuit which precedes the detector, unless the product detector does not do envelope detection secretly. If that happens, a strong signal farther away will break through by unwanted envelope detection.

I think that using product detectors in regenerative receivers should be further investigated. In regenerative receivers envelope detectors are usually used.

27526. Heater discussion

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-25 14:34:53 UTC
From: dulmagedon@...
Topic: 27526 Message: 27526

For those who concerns I had to order some tubes for my TCS station so I bought two 3L6s as well. Now the project has a 50L6 and two 35L6s which does nicely. It is not an easy project though and is fighting me at every turn.
Crystal osc works, AF pa works and PSU works but the busines section does not yet like the mix. Eventually it will happen.

donVE3LYX

27527. Re: Switch Mode Tube Supplies

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-26 16:26:03 UTC
From: d29602960@...
Topic: 27493 Message: 27527

Hi Bry,

Many thanks for the kind words about the paraset...

Bry wrote:
That is some of the most beautiful construction I have ever seen!!!
Did you build that or did someone else?
****

Yes, I built it a few years ago after catching the "paraset bug" and to satisfy curiosity about using a regen as a CW receiver.

It works well except that the paraset does not have provision for a variable coupling of the antenna, its pre-set so sometimes it can be overloaded by realy strong signals though in practice this happens very rarely. Its remarkabley sensitive for a receiver with just a couple of valves/tubes.

Thanks again for the kind words,

73,s

Des (M0AYF)

27528. RE: [regenrx] Re: Pentode Transconductance and Gain and more about circuit designs

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-27 08:58:16 UTC
From: Hubert Miller
Topic: 27238 Message: 27528

Questions, gentlemen:
the first paragraph below, what effect do you notice, with the grid tapped down on the coil?
the second statement, about the detector being pulled by SSB freqs close to the HF osc, how is this experienced? Does it cause signal 'warble' ?
thanks-
Hue

>By the way, my favorite regenerative detector circuit is the HARTLEY, using a pentode tube, with screen grid voltage control of the regeneration... Polishing the circuit I found out that the grid connection to the tank coil placed about 15 to 20 percent down the coil instead than at the top, was a good idea too...
73 and DX, Arnie Coro CO2KK

>When receiving SSB, the detector has to oscillate at one particular frequency ~1.5kHz away from the center of that receiving signal, to act as a BFO. Low frequencies of a voice are only 200-300Hz away from the detector frequency and sometimes they are strong, so the detector is tending, to lock into them. Now the detector is overloaded.
Best regards,
Bernd

27529. Re: Pentode Transconductance and Gain

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-27 11:20:12 UTC
From: b_weeber@...
Topic: 27238 Message: 27529

** what effect do you notice, with the grid tapped down on the coil?

Reduced influence of the regeneration control on the frequency.
Slightly increased Q of the tank circuit.

** about the detector being pulled by SSB freqs close to the HF osc,
** how is this experienced? Does it cause signal 'warble' ?

Strong signals are causing distortion, here is an example:
https://youtu.be/fV1QeA3NJ6U?t=360 https://youtu.be/fV1QeA3NJ6U?t=360

27530. Re: [regenrx] Re: Pentode Transconductance and Gain

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-27 12:26:03 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27238 Message: 27530

Dear amigos:

Second to none , IMHO the near optimum tank circuit is made using a high quality glazed ceramic coil form.... wound with silver wire (a luxury indeed) and a ceramic insulated air spaced variable capacitor... Optimize the circuit by connecting the grid to about 20 percent down the top of the coil, more or less, and the Hartley cathode tap also about 20 percent UP from the ground connection.

Of course that a standard circuit configuration using other materials for the coil form and with the grid connected to the top of the coil, and the cathode tape to about 25 / 30 percent from the bottom of the coil will work nicely , BUT, the glazed ceramic coil with large diameter wire spaced one wire diameter appart in a grooved coil form... is again IMHO the optimum....and this approach is also valid for building VFO tank circuits...

I am now stuck with my decades old TS820S Kenwood transceiver...it is now receiving OK, but no screen voltage on the 6146's tubes, so ZERO output... Seems like a 6146B screen electrode short circuited and that has damaged the voltage divider that feeds the screens from a 260 volts DC power supply...

After spending four days with that very sophisticated radio transceiver that uses a myriad of MOLEX type multiple pins with wire wrapping interconnecting the modules... I have decided to this will be the last repair job on that radio, and what little time is available will be spent, from now on designing and building my new ham radio station... using a regenerodyne and a separate transmitter.... of my own design... so will keep you all up to date on how the 2017 station project goes along, with the hope it will help others to enjoy home building of simple rigs !!!

73 and DX

Arnie Coro CO2KK

On 27/11/16 06:20, b_weeber@... [regenrx] wrote:
>
>
> ** what effect do you notice, with the grid tapped down on the coil?
>
> Reduced influence of the regeneration control on the frequency.
> Slightly increased Q of the tank circuit.
>
>
> ** about the detector being pulled by SSB freqs close to the HF osc,

> ** how is this experienced? Does it cause signal 'warble' ?
>
> Strong signals are causing distortion, here is an example:
> https://youtu.be/fV1QeA3NJ6U?t=360
>
>

27531. 6EH7 Detector...Then What

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-30 06:16:12 UTC
From: J Ed
Topic: 27531 Message: 27531

So I have some 6EH7 tubes I've hoped to one day use for RF stuff. They used to be RF and IF amplifiers used in televisions and they have a lot of transconductance. One would hope that a complicated receiver using two or three of these would have a huge dynamic range.

Still, I'm contemplating one in the front end of a regenerative receiver. For frequencies below 20 MHz, I doubt I'll need any gain in front of the detector. So I can use the tube to detect shortwave signals.

If I were to commit to such a project, what would I want to do next? Assume a common Armstrong-type detector with a tuned grid circuit and a tickler coil. Would it be simple as...say...40 dB of audio gain across two amplifier tubes? With another tube or two, I'd be able to create an active audio filter and reduce the adjacent signal interference. Not sure what else I could do to improve the circuit beyond a simple 0V2 type of receiver.

Ed AE7TE

27532. RE: [regenrx] 6EH7 Detector...Then What

Yahoo group: regenrx (2016 — 2017)
Date: 2016-11-30 07:29:04 UTC
From: Hubert Miller
Topic: 27531 Message: 27532

With this tube's high transconductance, maybe, i thought, it would function decently on ½ the rated filament voltage – or less, much in the
way the ARRL 6F8 project or the 1940s "B+ less " circuits. I'll maybe add that inquiry to the projects list – get a 6EH7 and try it on my tube
tester with lowered fil voltage.

After reading a QST article in the 1960s, i made a tube adapter for the 6EH7 to plug into the 6BA6 RF socket on my Lafayette KT-200 (HE-10)
receiver. It made a BIG difference.
-Hue _._,___

27533. Some great news

Yahoo group: regenrx (2016 — 2017)
Date: 2016-12-05 21:13:48 UTC
From: Bry Carling
Topic: 27533 Message: 27533

GREAT NEWS! NOVICE RIG ROUNDUP 2017 is launching soon, AND the December Issue of CQ Magazine has multiple NRR-related ads and articles! Huge thanks to our own Cory Sickles, WA3UVV there is a wonderful three page story about NRR. WOW! The Novice Rig Roundup announcement AD is on page 31. There is an article on building a novice transmitter circa 1956 on page 38, AND the article by Cory begins on Page 77. Everyone is welcome with any rig!

73 - Bry, AF4K

27534. MUPPET 716

Yahoo group: regenrx (2016 — 2017)
Date: 2016-12-17 20:27:34 UTC
From: Rob
Topic: 27534 Message: 27534

Manhattan-Ugly-Professional-Placement-Experimental-Technique

MUPPET 716 :

http://www.learnmorsecode.com/716/716N8RVE.jpg

thanks John

27535. Re: [regenrx] MUPPET 716

Yahoo group: regenrx (2016 — 2017)
Date: 2016-12-17 20:36:12 UTC
From: William Wood
Topic: 27534 Message: 27535

NICE
:)

On Dec 17, 2016, at 2:27 PM, Rob roomberg@... [regenrx] <regenrx@yahoogroups.com> wrote:

> Manhattan-Ugly-Professional-Placement-Experimental-Technique
>
> MUPPET 716 :
>
> http://www.learnmorsecode.com/716/716N8RVE.jpg
>
>
> thanks John

27536. Re: 7.16 Resonator Regen Lives...

Yahoo group: regenrx (2016 — 2017)
Date: 2016-12-24 20:05:39 UTC
From: rhulett1@...
Topic: 27256 Message: 27536

Ordered resonators for 3.58 and 4 MHz, the "7.16"radio receives SSB and CW fine with those too. 73, Curt KB5JO

27537. All on AC based PSU

Yahoo group: regenrx (2016 — 2017)
Date: 2016-12-30 02:55:21 UTC
From: dulmagedon@...
Topic: 27537 Message: 27537
Attachments: 1 described; binary payloads are missing from this source WARC

Recently I have been playing with my breadboard station. Experimenting with a 6550 tube in place of the 616 I had been using. Results were encouraging so I continued and decided to build a new higher voltage PSU for the transmitter from my junk box. I had an odd Hammond transformer with a 250-0-250 winding and I had a Hammond 6 or 12 229 series transformer so I married both to get the required voltages. I used what I call to myself a 3/4 wave rectifier system with two diodes and filtered it with a pair of 100uf 500 volts caps in series. Since building one a few year ago for my twin 811A linear it has become my PSU design of choice and everything now running here save one is of that design. It is very quiet. I built the load resistor from a string of three 10 watt 27K wirewounds and realized I could steal power from the last resistor joint to ground and use it for my RX with a little wiggling. I dropped it further and wound up with 80volts feeding the regen (design is from the 1943 ARRL handbook except I used a 6SL7.) I have been running it on batteries (ten 9 volts). Right away it worked and hum was not objectionable EXCEPT on the cusp of regeneration. Just to see I added a 100 uf across the incoming B+ power right on the regens terminal strip. Worked like a charm. Even though hum was well below annoying before when on the edge of regen the regen was able to pick it up. The extra right at the set killed it. And I am going to leave it so. If there is one thing I have learned with regens . When you get it right STOP!
I have sent a very enjoyable evening with my station SWLing and doing some ops also.
don Ve3LYX

27538. Re: All on AC based PSU

Yahoo group: regenrx (2016 — 2017)
Date: 2016-12-30 20:31:56 UTC
From: dulmagedon@...
Topic: 27537 Message: 27538
Attachments: 1 described; binary payloads are missing from this source WARC

Here it is with the big tube in as it stands today
donVe3LYX

27539. Re: [regenrx] Re: All on AC based PSU [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-12-30 20:44:22 UTC
From: Richard
Topic: 27537 Message: 27539

What's the big tube? Curious minds really want to know.

Richard, AA1P

On 12/30/2016 03:31 PM, dulmagedon@... [regenrx] wrote:
>
> Here it is with the big tube in as it stands today
> donVe3LYX
>
>
> View attachments on the web
> <https://groups.yahoo.com/neo/groups/regenrx/attachments/373308324;_ylc=X3oDMTJyMG5vdGJkBF9TAzk3MzU5NzE0BGdycElkAzEzOTk2OTA3BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDYXR0YWNobWVudARzbGsDdmlld09uV2ViBHN0aW1lAzE0ODMxMjk5MTk->
>
> ---
> Posted by: dulmagedon@...
> ---
> <https://groups.yahoo.com/neo/groups/regenrx/conversations/messages/27538;_ylc=X3oDMTJycWM0NGo5BF9TAzk3MzU5NzE0BGdycElkAzEzOTk2OTA3BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAMyNzUzOARzZWMDZnRyBHNsawNycGx5BHN0aW1lAzE0ODMxMjk5MTk-?act=reply&messageNum=27538>
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27540. Re: [regenrx] Re: All on AC based PSU power supply

Yahoo group: regenrx (2016 — 2017)
Date: 2016-12-31 00:52:52 UTC
From: Rob
Topic: 27537 Message: 27540

Can you show a picutre of the power supply?

On 12/30/2016 03:44 PM, Richard brunneraa1p@... [regenrx] wrote:
>
> What's the big tube? Curious minds really want to know.
>
> Richard, AA1P
>
>
> On 12/30/2016 03:31 PM, dulmagedon@... [regenrx] wrote:
>>
>> Here it is with the big tube in as it stands today
>> donVe3LYX
>>
>> View attachments on the web
>> <https://groups.yahoo.com/neo/groups/regenrx/attachments/373308324;_ylc=X3oDMTJyMG5vdGJkBF9TAzk3MzU5NzE0BGdycElkAzEzOTk2OTA3BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDYXR0YWNobWVudARzbGsDdmlld09uV2ViBHN0aW1lAzE0ODMxMjk5MTk->
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>> Posted by: dulmagedon@...
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27541. Re: [regenrx] Re: All on AC based PSU [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2016-12-31 13:19:08 UTC
From: dulmagedon@...
Topic: 27537 Message: 27541

The big tube is a KT88 North American version . A 6550. They wire exactly as a 6L6 (7AC pinout) and can stand above 600 volts. I have heard as high as 900 but I think for me 650v would be where I would draw the line. I had wanted to try a KT88 for years and discovered there was an AM HF set used by the Canadian navy that was a pair of KT88 modulated by a pair of KT66s. Even as a direct sun it does show power improvement and significant on this old breadboard set. The new PSU runs it just below 500 volts key down in tune which is light but it was the only transformer in my junk box. I may buy a new Hammond for it and raise the bar again. However I don't want lose the abilty to run the regen from it so will be willing to spend the extra if need be for a multi voltage winding. The PSU is enclosed because it is ugly however here is how it is made.
I ignored the transformer centre tap and used the outer ends netting me 500 volts AC fused on the 120 primary with a 3 amp fuse. The high side (upper in a schematic) goes through a 10 ohm 10 watt wirewound and connects to a 1n4007 diode's positve termnal. The low side (in the schematic in my minds eye) goes straight in but has a 1n4007 connected to it also at its pos terminal. It goes up to the other diode but connect to the upper line AFTER the diode (two N terminals are connected together.) a pair of 100 uf 500 volt electrolytics in series at connected across the output Positive to upper wire (just past where the diodes meet) and neg to the bottom or neg line. I suppose i should out equalizing resistors across them but often dont if there is only two and they almost meet the rating anyway. (If there were three or more i would always do that.)
This feed a series of three series connected 27K wirewound 10 watt resistors used as bleeders mainly but also dropping resistors for the rx voltage. If I had had three 10K 10watt wirewounds I would have used them for the last 27K resistor as it would have allowed me abit more leeway in regen voltage selection. However I did not so I was able to reduce it further right at the set. As stated I added the extra 100 uf cap at the regen so any hum pick up or other undesireable crap would be dealt a final blow before entering my set. I have done this before so got to liking it. this is probably not the most exotic PSU design . In fact some may find it laughable BUT as someone who has fought hum on AC supplies especially with regens as well a small transmitters I have come to like this design simply because for me it always works. The diodes do not need bypassing either. in fact it is quieter without it. How do I know that? Because I took the time to try it both with and without .01uf caps as diode bypasses. Hope that is enuf info to satisfy your curiosity. I have now four PSUs running here carrying this design. I prefer it myself to a bridge as it is for me quieter. I am totally results oriented so that is what I have and how I arrived here.
donVe3LYX

Oh Yeah I forgot. Currently I was able to buy the 6550 tube for LESS then a 6L6. ($37.95 USfunds) It was not always so which held me back from trying this for several years.

27542. Re: [regenrx] Re: All on AC based PSU

Yahoo group: regenrx (2016 — 2017)
Date: 2016-12-31 20:09:38 UTC
From: Daniel Donnelly
Topic: 27537 Message: 27542

Beautiful simplistic bread board layout!
A joy to just look at, It must be a pleasure to operate.
Happy new year.
Dan

On Sat, Dec 31, 2016 at 6:19 AM, dulmagedon@... [regenrx] <
regenrx@yahoogroups.com> wrote:

>
>
> The big tube is a KT88 North American version . A 6550. They wire exactly
> as a 6L6 (7AC pinout) and can stand above 600 volts. I have heard as high
> as 900 but I think for me 650v would be where I would draw the line. I had
> wanted to try a KT88 for years and discovered there was an AM HF set used
> by the Canadian navy that was a pair of KT88 modulated by a pair of KT66s.
> Even as a direct sun it does show power improvement and significant on this
> old breadboard set. The new PSU runs it just below 500 volts key down in
> tune which is light but it was the only transformer in my junk box. I may
> buy a new Hammond for it and raise the bar again. However I don't want lose
> the abilty to run the regen from it so will be willing to spend the extra
> if need be for a multi voltage winding. The PSU is enclosed because it is
> ugly however here is how it is made.
> I ignored the transformer centre tap and used the outer ends netting me
> 500 volts AC fused on the 120 primary with a 3 amp fuse. The high side
> (upper in a schematic) goes through a 10 ohm 10 watt wirewound and
> connects to a 1n4007 diode's positve termnal. The low side (in the
> schematic in my minds eye) goes straight in but has a 1n4007 connected to
> it also at its pos terminal. It goes up to the other diode but connect to
> the upper line AFTER the diode (two N terminals are connected together.) a
> pair of 100 uf 500 volt electrolytics in series at connected across the
> output Positive to upper wire (just past where the diodes meet) and neg to
> the bottom or neg line. I suppose i should out equalizing resistors across
> them but often dont if there is only two and they almost meet the rating
> anyway. (If there were three or more i would always do that.)
> This feed a series of three series connected 27K wirewound 10 watt
> resistors used as bleeders mainly but also dropping resistors for the rx
> voltage. If I had had three 10K 10watt wirewounds I would have used them
> for the last 27K resistor as it would have allowed me abit more leeway in
> regen voltage selection. However I did not so I was able to reduce it
> further right at the set. As stated I added the extra 100 uf cap at the
> regen so any hum pick up or other undesireable crap would be dealt a final
> blow before entering my set. I have done this before so got to liking it.
> this is probably not the most exotic PSU design . In fact some may find it
> laughable BUT as someone who has fought hum on AC supplies especially with
> regens as well a small transmitters I have come to like this design simply

> because for me it always works. The diodes do not need bypassing either. in
> fact it is quieter without it. How do I know that? Because I took the time
> to try it both with and without .01uf caps as diode bypasses. Hope that is
> enuf info to satisfy your curiosity. I have now four PSUs running here
> carrying this design. I prefer it myself to a bridge as it is for me
> quieter. I am totally results oriented so that is what I have and how I
> arrived here.
> donVe3LYX
>
> Oh Yeah I forgot. Currently I was able to buy the 6550 tube for LESS then
> a 6L6. ($37.95 USfunds) It was not always so which held me back from trying
> this for several years.
>
>

27543. Torn.E.b. in pot-metal production ?

Yahoo group: regenrx (2016 — 2017)
Date: 2016-12-31 20:27:27 UTC
From: Hubert Miller
Topic: 27543 Message: 27543

Someone has asked me if a German, Torn.E.b. regen receiver weighing 34 lbs. is likely to be composed of pot-metal (wartime expedient)
compared to the earlier non pot-metal production. The receiver is dated 1943 and that was the year (as far as i know) that pot-metal
production started. Before that year, definitely safe, and in 1944 and 1945, pot metal definitely - i mean in ground radios. This example
is 1943, and i don't have it to examine, hence the question.
thanks-
Hue

27544. Re: [regenrx] Re: All on AC based PSU

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-01 01:59:34 UTC
From: dulmagedon@...
Topic: 27537 Message: 27544

Thank you for your interest and Happy New Year. Yes running it is almost addictive.
donVe3LYX

27545. Re: Torn.E.b. in pot-metal production ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-01 11:23:52 UTC
From: b_weeber@...
Topic: 27543 Message: 27545

Happy New Year!

http://www.radiomuseum.org/r/mil_tornister_empfaenger_b_b.html?language_id=2
http://www.radiomuseum.org/r/mil_tornister_empfaenger_b_b.html?language_id=1
Im späteren Kriegsverlauf gefertigte Geräte waren wesentlich schwerer (Zinkspritzguss anstelle Aluminiumspritzguss) und wurden ohne eingebautes Kontrollinstrument ausgeliefert, stattdessen Inschrift "Gerät ohne Messinstrument betriebsklar"
Products manufactured in the later warfare were much heavier (zinc injection molding instead of aluminum injection molding) and were delivered without a built-in control instrument, instead inscription "device ready to use without measuring instrument".

Best regards,
Bernd

27546. Re: Torn.E.b. in pot-metal production ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-01 11:46:00 UTC
From: dulmagedon@...
Topic: 27543 Message: 27546

There is still a lot of difference between zinc and potmetal which is essentially made from anything that with melt and pour together Or in my industry garbage metal we called it. Zinc was commonly used for Carbs. Potmetal for trim castings that were to be plated anyway. Potmetal in a German radio? Ich glaube nicht. Es ist nicht die deutsche weg!
donVe3LYX

27547. Happy New Year

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-01 17:37:02 UTC
From: Leonard Meek
Topic: 27547 Message: 27547

Hauoli Makahiki Hou, everyone.

27548. [regenrx] Happy New Year

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-01 17:56:00 UTC
From: Michael
Topic: 27547 Message: 27548

On 01.01.17 17:37, 'Leonard Meek' lemeek@... [regenrx] wrote:

Hauoli Makahiki Hou, everyone.

And to you, Leonard, especially for the "Ides of January"...

MichaelUK

27549. Re: [regenrx] Happy New Year

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-01 20:00:23 UTC
From: i5skk.qrp@...
Topic: 27547 Message: 27549

Hallo Leonard,
this is Alex I5SKK. I watched all your posted files in the subdirectory of the section and found them really interesting. It would be possible to change ideas and opinion directly via email, around the tests you made, as I saw a lot of tests and different versions of regen RX you made. I'd be really grateful for this. Many thanks in advance and once more, my best wishes to you and the group !
73 de

Alex I5SKK ex I0SKK

27550. Re: [regenrx] Re: Torn.E.b. in pot-metal production ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-01 23:08:09 UTC
From: Hubert Miller
Topic: 27543 Message: 27550

So far i have figures for the receiver weight of 22, 34, 41, and 44 lbs.
The 22 lbs. sounds realistic for the design spec weight. When you add that to the separate battery box with its vibrator supply and wetcell 2 volt
battery, which likely adds maybe another 15 lbs., you have one pretty good pack load for the carrier.
At 44 lbs plus the battery box you have a load that becomes unpleasant.
I have 2 of the receivers that suffer the "zink-pest" metal decay.
One has a coil turret with some of the sections expanded, so that the turret clearance is no longer there and the turret is jammed, cannot rotate.
The other radio has a more basic challenge. The front panel has expanded and now is jammed tight. I have tried every trick and found no way
to successfully remove the radio from its cabinet. A slight additional complication is that the metal of the front panel is also now kind of fragile.
You might think your usual front panel might bend if screwdriver crowbarred. Not this metal; it will instead crack, like it was dried clay.

I had a GN-45 hand cranked generator for the BC-654 radio. I was amazed when one of the protuberances, the hood for the power connector,
cracked into pieces just like the German pot metal.
-Hue

Subject: [regenrx] Re: Torn.E.b. in pot-metal production ?

There is still a lot of difference between zinc and potmetal which is essentially made from anything that with melt and pour together Or in my industry garbage metal we called it.
Zinc was commonly used for Carbs. Potmetal for trim castings that were to be plated anyway.
Potmetal in a German radio? Ich glaube nicht. Es ist nicht die deutsche weg!
donVe3LYX
.

27551. Re: Torn.E.b. in pot-metal production ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-02 00:26:22 UTC
From: deadgoose@...
Topic: 27543 Message: 27551

It strikes me that a 3D printer might be used to create replacement parts?

73 /paul W3FIS

27552. Re: Torn.E.b. in pot-metal production ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-02 00:44:26 UTC
From: dulmagedon@...
Topic: 27543 Message: 27552

Aluminum casting is a lot of fun. Does not require anything exotic. Patterns can be made from Styrofoam and buried in the sand or pressing can be made in the sand and poured as an open mold as long as they are level. A texas weedburner of about 55000btu (Princess Auto or Harbour Freight) will do the melt and crucibles can be made from Exhaust pipe by anyone with mild welding skills. Wooden pattern work best for pressing sand for open pours. Scrap aluminum can be cut on a standard table saw into small enough pieces to melt. Not for everyone but an awful lot of fun and very interesting.
Zinc can be cast at lower temps and sometimes in hard rubber type molds. If the XYL molds chocolate she can teach you everything you need to know. If that is not an option. Most towns of any size will have a aluminum foundry of some type. (if you think not ask around. You will be surprised.) If you cosmetically repair your old piece with body filler etc and take it to them they will cast you a new piece using you cobbled together cosmetically repaired piece as a core and it will be affordable. Not to mention very interesting.
donVe3LYX

27553. 12AU7 Regen Heater Connections

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-02 01:54:56 UTC
From: wb8yyy@...
Topic: 27553 Message: 27553

I am building a low voltage receiver from a schematic by VK6FH. In this he shows pin 4 connected to 12 volts, pins 5 and 8 connected to ground. There are no connections shown to pin 9 -- does this make sense? Does the tube actually contain two filaments as shown in the schematic?

I saw a receiver demonstrated by VK3YE -- set up for the broadcast band and also 160m operation. I am pretty confident building this thing, except for wiring to the filament(s) and also it will be interesting to see if my loop stick works -- it has a second set of low inductance windings wired in series with the larger one -- I have not given thought to which way the sense should be on the smaller coil to obtain regeneration.

Info appreciated - I realize its a very simple circuit.

I did check the variable cap I have - it has 40 - 419 pF so it should give me BCB with a loopstick harvested from BCB receiver.

Curt

27554. Re: [regenrx] 12AU7 Regen Heater Connections

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-02 03:15:21 UTC
From: J Ed
Topic: 27553 Message: 27554

There's an error. A 12AU7, as well as other twin triodes in the same vein, have two 6v filaments. One runs from pin 4 to 9, and the other runs from 5 to 9. For 12v operation, put 12v across 4 and 5. For parallel operation, place 6v on 4 and 5 and the return for 6v on 9.

I built a regeneration with a 12AU7 and 12AU7 like this. I used a 24v power brick and placed all filaments in series, using a 10 ohm resistor to limit current.

Ed AE7TE

On Jan 1, 2017 5:54 PM, "wb8yyy@... [regenrx]" <
regenrx@yahoogroups.com> wrote:

I am building a low voltage receiver from a schematic by VK6FH. In this he shows pin 4 connected to 12 volts, pins 5 and 8 connected to ground. There are no connections shown to pin 9 -- does this make sense? Does the tube actually contain two filaments as shown in the schematic?

I saw a receiver demonstrated by VK3YE -- set up for the broadcast band and also 160m operation. I am pretty confident building this thing, except for wiring to the filament(s) and also it will be interesting to see if my loop stick works -- it has a second set of low inductance windings wired in series with the larger one -- I have not given thought to which way the sense should be on the smaller coil to obtain regeneration.

Info appreciated - I realize its a very simple circuit.

I did check the variable cap I have - it has 40 - 419 pF so it should give me BCB with a loopstick harvested from BCB receiver.

Curt

27555. Re: [regenrx] Re: All on AC based PSU [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-02 03:40:36 UTC
From: kb3omm@...
Topic: 27537 Message: 27555

You mentioned ignoring the center tap on the power supply transformer. I assume you are running a bridge rectifier, if so then the center tap will provide half the voltage of the bridge output. Just add a filter cap and good to go for 250V for the regen.

73, Kevin KB3OMM

27556. Re: [regenrx] Re: All on AC based PSU

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-02 03:41:53 UTC
From: Rob
Topic: 27537 Message: 27556

Is there a schematic of this power supply?

On 01/01/2017 10:40 PM, kb3omm@... [regenrx] wrote:
>
> You mentioned ignoring the center tap on the power supply transformer.
> I assume you are running a bridge rectifier, if so then the center tap
> will provide half the voltage of the bridge output. Just add a filter
> cap and good to go for 250V for the regen.
>
> 73, Kevin KB3OMM
>
>

27557. Re: [regenrx] 12AU7 Regen Heater Connections

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-02 03:44:41 UTC
From: John Marshall
Topic: 27553 Message: 27557

Curt,

There are two filaments, one for each triode. One end of each filament is connected to pin 9 so feeding 12 volts across pins 4 and 5 gives 6 volts across each filament. It's a little odd that the schematic shows pin 9 twice but you could think of it as pin 9 internally connected to pin 9 :)

John, KU4AF
Pittsboro, NC

On Jan 1, 2017, at 8:54 PM, wb8yyy@... [regenrx] wrote:

>
>
> I am building a low voltage receiver from a schematic by VK6FH. In this he shows pin 4 connected to 12 volts, pins 5 and 8 connected to ground. There are no connections shown to pin 9 -- does this make sense? Does the tube actually contain two filaments as shown in the schematic?
>
> I saw a receiver demonstrated by VK3YE -- set up for the broadcast band and also 160m operation. I am pretty confident building this thing, except for wiring to the filament(s) and also it will be interesting to see if my loop stick works -- it has a second set of low inductance windings wired in series with the larger one -- I have not given thought to which way the sense should be on the smaller coil to obtain regeneration.
>
> Info appreciated - I realize its a very simple circuit.
>
> I did check the variable cap I have - it has 40 - 419 pF so it should give me BCB with a loopstick harvested from BCB receiver.
>
> Curt

27558. Re: [regenrx] Re: Torn.E.b. in pot-metal production ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-02 11:24:15 UTC
From: mikhail-vulkov@...
Topic: 27543 Message: 27558
Attachments: 1 described; binary payloads are missing from this source WARC

LIGHTWEIGTH SOLID STATE „BERTA"

Solid state substitutes of RV2P800 operate better than original vacuum tubes. The teceiver is powered by 4 Li-ion cells (from 14.8V laptop battery). NOTE: Transistors Q1 and Q2 in cascode circuit have different cutoff voltages. The circuit is more complicated with equal transistors because the gate of Q2 is powered by voltage divider.

Mikhail BG

27559. Re: [regenrx] Re: All on AC based PSU

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-02 11:26:00 UTC
From: Bill Cromwell
Topic: 27537 Message: 27559

Hi,

Look for "economy power supply". They were/are popular.

73,

Bill KU8H

On 01/01/2017 10:41 PM, Rob roomberg@... [regenrx] wrote:
>
> Is there a schematic of this power supply?
>
> On 01/01/2017 10:40 PM, kb3omm@... [regenrx] wrote:
>>
>> You mentioned ignoring the center tap on the power supply
>> transformer. I assume you are running a bridge rectifier, if so then
>> the center tap will provide half the voltage of the bridge output.
>> Just add a filter cap and good to go for 250V for the regen.
>>
>> 73, Kevin KB3OMM
>>
>
>

--
bark less - wag more

27560. Re: [regenrx] Re: All on AC based PSU [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-02 12:42:48 UTC
From: dulmagedon@...
Topic: 27537 Message: 27560

No I believe if you reread you will see I said I do not use a bridge however 250v is too much for the regen. The design I used was intended for 45 volts but will work to 90volts. I used about 80v. I found on some advice Dave Stinson gave on building ARC5 power supplies (which may seem unrelated but is relavent) that stealing taps of the bleeder resistor string works very well and uses a lot less parts. On a regen or most receivers for instance current draw is very low compared to a transmitter. I have tried that too and had it on my no 19 set PSU for a couple of years (275v for low HT from centre tap and 550v from top end for PA tube) but recently (Nov) redid it this way and came away with a much quieter PSU. I have so redone most of my shop supplies to this design because there is no detectable hum on my signal and I can power my regens and receivers with no concerns.
donVe3LYX

27561. Re: [regenrx] Re: All on AC based PSU

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-02 12:45:36 UTC
From: dulmagedon@...
Topic: 27537 Message: 27561

That is what I used to use but this is not that design. I described it n detail in the post. Shouldn't require a schematic. I didn't use one.
donVe3LYX

27562. Re: regen superhet

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-02 15:24:43 UTC
From: wd4nka@...
Topic: 27454 Message: 27562

Fixed regen detector, that would be along the lines of a Super Gainer. May want to move up to 2.0mc, if only because the MW BCB now extends to 1.7mc.

If your regen detector is fixed, that means you will be tuning with your mixer's local oscillator (LO) which is fine. Actually, it's pretty much the standard architecture for most superhets, regen or no.

I might suggest, however, since the LO is much higher in frequency and therefore subject to greater variances and such, to keep your tuner at the lowest frequency portion of your receiver, which is why I always recommend a xtal controlled LO and a regen tuner that covers something like 2.0- 3.0mc. Down there, regens behave and tune very nicely, well on par with any other receiver type. It makes things much, much simpler when it comes to band selection (just change extals) and calibration between the bands.... with proper band xtal selection, that is....

A low band tuner with a high band xtal converter, is really all a Regenerodyne is. Regenerodynes always tune at the detector stage, never at the LO stage. That's Frank Jones' turf.

I know this post is dated november, and me, your poor listowner has been long engaged elsewhere and umpteen different levels, but from time to time I still check in here. I read this and just wanted to respond. I think Prof. Arnie already covered pretty much what I've just posted. But as one of the Regenerodyne developers, I always take the opportunity to do a shameless plug for it, lol!

BTW, my NRR station for the past two, and upcoming third event this Feb, is entirely HB with a 6V6G MOPA and... you guessed it.... my old Regenerodyne that I built back some twenty-five-odd years ago. Still kicking on all bands 20, 30, and 40m. Great communications receiver. If you don't mind code communications with 1930-era filtering!

Happy New Year!

gary // wd4nka

27563. Re: [regenrx] Happy New Year

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-02 17:24:11 UTC
From: Leonard Meek
Topic: 27547 Message: 27563

Hi Alex. I'm not an expert or a perfectionist. Most of my circuits are copied from others, or from just guessing. Lately I've been using an Excel spread sheet to do the circuit calculations with some success. Excel has all the math capabilities needed. I simply take all the equations I can find and program the computer to give me the apporximate values for each component, using data from the tube characteristic curves. Since there is so much variation between tubes of the same type, I don't try to get exact values. The good thing about the program is, I can change an input value and instantly see the result without going through the tedious calculations over and over. Not perfect, but good enough is good enough. "Hollow State Design" by Grayson Evans is a good place to start. He even suggests using a spreadsheet too.

Leonard

----- Original Message -----
From: i5skk.qrp@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Sunday, January 01, 2017 10:00 AM
Subject: Re: [regenrx] Happy New Year

Hallo Leonard,
this is Alex I5SKK. I watched all your posted files in the subdirectory of the section and found them really interesting. It would be possible to change ideas and opinion directly via email, around the tests you made, as I saw a lot of tests and different versions of regen RX you made. I'd be really grateful for this. Many thanks in advance and once more, my best wishes to you and the group !
73 de

Alex I5SKK ex I0SKK

27564. Re: [regenrx] Happy New Year

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-03 01:48:44 UTC
From: dulmagedon@...
Topic: 27547 Message: 27564

BTW Leonard , just for the record , I like the way you "guess"
donVe3LYX

27565. Re: [regenrx] Happy New Year

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-03 11:57:06 UTC
From: i5skk.qrp@...
Topic: 27547 Message: 27565

Many thanks Leonard,
I did some receiver and some with similar to your config. So did like to share impression and performnaces. That's ok, I normally make measures and design calculations so the math sheet is just used and really useful indeed.
Many thanks for all, and wish you an happy new year, hope to see your next receivers with pleasure :)
Best 73

Alex

27566. Bayou Jumper

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-10 18:38:19 UTC
From: deadgoose@...
Topic: 27566 Message: 27566

New kit out from 4SQRP folks. Modern take on WW2 Paraset. Receiver is a regenerative receiver -- classic "Armstrong" style. Instead of variable capacitors, they use varactors, both for tuning, and for throttle. Because it is designed for the 40 meter CW band, tuning range is slightly less than 200 Kc.

Crystal controlled.

Toroid for tuning coil. Grounded base un-tuned RF amplifier, pretty standard audio.

MOPA transmitter side, gives 5 watts.

Check it out..

73 /paul W3FIS

27567. Re: Bayou Jumper

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-10 18:51:55 UTC
From: rhulett1@...
Topic: 27566 Message: 27567

I got one from the first run. Happy I did because the first run sold out in about 2 days. A really first class kit! I had built a prototype from PCB got from N5IB back in the summer and paired with a 2fer transmitter. Worked very well. Most stable regen have ever used. When the 4SQRP kit came out, bought one because the front panel, silkscreen, onboard key sold me.

After completing the kit in 4-6 hours right after Christmas, have been prowling 40M during the day with the radio. It is rock steady on frequency and regeneration. So far have worked 25 stations in 15 states, surely the real spies would have been happy to carry one of these modern implementations into the war zone.

My 2 cents...

72, Curt KB5JO

27568. Re: Bayou Jumper

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-10 21:53:45 UTC
From: mikhail-vulkov@...
Topic: 27566 Message: 27568
Attachments: 1 described; binary payloads are missing from this source WARC

BAD REGEN STAGE: The regen stage of „Bayou Jumper“ differs from Armstrong circuit because in katode (source) is involved degeneration (negative feedback) at audio frequencies. It decreases modulation index and sensitivity. To avoid this drawback, you should use for demodulation a separate diode connected to COM rail.

27569. Re: Bayou Jumper

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-11 13:12:17 UTC
From: dawmast@...
Topic: 27566 Message: 27569

Or use another FET as a Drain Bend Detector, which is connected onto the top of the main tank circuit.

27570. Grid Leaks

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-16 06:03:32 UTC
From: Alvin Schmitt
Topic: 27570 Message: 27570

http://vintagercfiles.com/Grid_Leaks/Vol%201/ Alvin P. Schmitt

APSTRON LLC
P.O. Box 201Newport VA 24128-0201

1-888-730-6478
http://www.apsministries.org/

27571. Re: [regenrx] Grid Leaks

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-16 06:37:38 UTC
From: Rob
Topic: 27570 Message: 27571

That was an interesting find.
Thank you.

On 01/16/2017 01:03 AM, Alvin Schmitt schmitt_alvin@... [regenrx]
wrote:
> http://vintagercfiles.com/Grid_Leaks/Vol%201/
>

27572. what is sulfate of zinc and acidulated water and saturated copper sulfate crystals ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-16 07:23:40 UTC
From: Rob
Topic: 27572 Message: 27572

what is sulfate of zinc and acidulated water and saturated copper
sulfate crystals ?
Do we have any chemists out there?

I found an old time article how to make a battery and it specified

sulfate of zinc and acidulated water and saturated copper sulfate crystals

http://www.learnmorsecode.com/regen2/battery02.jpg

The article said to use ZINC SULFATE
or
ACIDULATED water.

So I got look up ZINC SULFATE on the web and is says we can buy 220mg
zinc sulfate capsules...to eat.
huh?!!??
edible batteries?

Zinc Sulfate (220mg) - 100 Capsules
Zinc sulfate is an inorganic compound and dietary supplement. As a
supplement it is used to treat zinc deficiency

but hey...it did say "OR"
and when I look up acidulated water it said

wiki:
Acidulated water is water that an acid has been added to it, usually
lemon juice, lime juice or vinegar. Citric acid and ascorbic acid can
also be used.

Acidulated water can be made by combining 1.5 tablespoons vinegar or 3
tablespoons lemon juice.

sooooo..... OK... this doesn't sound real toxic or dangerous to show
and tell kids battery chemistry....

AND THEN
there is the saturated copper sulfate....
which is readily available at th eharware store
ROOT KILL copper sulfate pentahydrate 99%
and instructions on the web say:

First, you need a saturated copper sulfate solution so the crystals can
form as the liquid evaporates. All you need to do to make the solution
is to stir copper sulfate into very hot water until no more will

dissolve. There are two ways to grow the crystals.Apr 26, 2014
How To Grow Blue Copper Sulfate Crystals - Science Notes and Projects
https://sciencenotes.org/how-to-grow-blue-copper-sulfate-crystals/

OR
just buy 10 pounds of crystals from a seed supply house for $32.

So is this feasible or would parents be pissed if they knew their kids were near these chemicals?

27573. Re: what is sulfate of zinc and acidulated water and saturated copper sulfate crystals ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-16 11:26:52 UTC
From: mikhail-vulkov@...
Topic: 27572 Message: 27573

Let parens use boiled potato! A potato boiled for eight minutes can make for a battery that produces ten times the power of a raw one.
A Potato Battery Can Light Up a Room For Over a Month http://www.smithsonianmag.com/innovation/a-potato-battery-can-light-up-a-room-for-over-a-month-180948260/

http://www.smithsonianmag.com/innovation/a-potato-battery-can-light-up-a-room-for-over-a-month-180948260/

A Potato Battery Can Light Up a Room For Over a Month http://www.smithsonianmag.com/innovation/a-potato-battery-can-light-up-a-room-for-over-a-month-180948260/ A crop-based power system coming out of Israel is significantly cheaper than batteries, but why isn't anyone interested?

View on www.smithsonianma... http://www.smithsonianmag.com/innovation/a-potato-battery-can-light-up-a-room-for-over-a-month-180948260/
Preview by Yahoo

27574. Re: [regenrx] Re: what is sulfate of zinc and acidulated water and saturated copper sulfate crystals ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-16 11:31:48 UTC
From: Cecil Bayona
Topic: 27572 Message: 27574

Because a pile of molding stinking potatoes is not as convenient as
regular batteries.

On 1/16/2017 5:26 AM, mikhail-vulkov@... [regenrx] wrote:
>
>
> Let parens useboiled potato!
>
> Apotato boiled for eight minutes can make for a battery that produces
> ten times the power of a raw one.
>
> A Potato Battery Can Light Up a Room For Over a Month
> <http://www.smithsonianmag.com/innovation/a-potato-battery-can-light-up-a-room-for-over-a-month-180948260/>
>
> image
> <http://www.smithsonianmag.com/innovation/a-potato-battery-can-light-up-a-room-for-over-a-month-180948260/>
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> A Potato Battery Can Light Up a Room For Over a Month
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>
> A crop-based power system coming out of Israel is significantly cheaper
> than batteries, but why isn't anyone interested?
>
> View on www.smithsonianma...
> <http://www.smithsonianmag.com/innovation/a-potato-battery-can-light-up-a-room-for-over-a-month-180948260/>
>
>
> Preview by Yahoo
>
>
>
>
> --
> Posted by: mikhail-vulkov@...

--
Cecil - k5nwa
http://thepartsplace.k5nwa.com/

27575. Re: [regenrx] Re: what is sulfate of zinc and acidulated water and saturated copper sulfate crystals ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-16 12:21:44 UTC
From: Dan Ferguson
Topic: 27572 Message: 27575

Or, as Professor Proton (Bob Newhart) explained to Penny (Kaley Cuoco)
on The Big Bang Theory when she asked if the potato battery wouldn't
solve the world's energy problems: "No!"

- - - - - - -

Dan Ferguson
Combined SWBC skeds (Aoki/EiBi/HFCC/others):
https://groups.yahoo.com/neo/groups/swskeds/info
Donations: If you like my schedule files buy me a beer,
drink it for me, then tell me how much I enjoyed it.

"The cure for boredom is curiosity. There is no cure for curiosity." [BBC]

On 1/16/2017 6:31 AM, Cecil Bayona cecil.bayona@... [regenrx] wrote:
> Because a pile of molding stinking potatoes is not as convenient as
> regular batteries.
>
> On 1/16/2017 5:26 AM, mikhail-vulkov@... [regenrx] wrote:
>>
>> Let parens useboiled potato!
>>
>> Apotato boiled for eight minutes can make for a battery that produces
>> ten times the power of a raw one.
>>
>>
>>

27576. Re: [regenrx] Re: what is sulfate of zinc and acidulated water and saturated copper sulfate crystals ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-16 14:25:25 UTC
From: dulmagedon@...
Topic: 27572 Message: 27576

Batteries do not smell nice either so they are put in cases as can be potoatoes. I am going to try this today.
I see a new gel cell on my future. Copper pipe and aluminum tubing spaced by mashed potatoes in a tupperware container. Zinc is not readily available like as in this morning. Did try cannig jars steel and aluminum rods with vinagar once with some success.
Thanks for posting.
donVe3LYX

27577. Re: [regenrx] Re: what is sulfate of zinc and acidulated water and saturated copper sulfate crystals ? potato

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-16 16:51:39 UTC
From: Rob
Topic: 27572 Message: 27577

I was thinking more along the lines of building the battery...stacking a
dozen oilve bottles in a wooden crate....
and running a tube regenerative receiver.
I am not doubting the amperage available from a pile of potatoes but
and this is the BUT
I've only seen LED circuits and calculators that run on button batteries
used as examples
of what these batteries can do.
So... have we any potato battery measurements to calculate how many of
these cells adds up enough amperage to
play in tube land?
And then there is the metal purchase to consider.
Copper and zinc are available but adds up real quick when you need
hundred batteries made of potatoes.

On 01/16/2017 06:26 AM, mikhail-vulkov@... [regenrx] wrote:
>
> Let parens useboiled potato!
>
> Apotato boiled for eight minutes can make for a battery that produces
> ten times the power of a raw one.
>
> A Potato Battery Can Light Up a Room For Over a Month
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> A Potato Battery Can Light Up a Room For Over a Month
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>
> A crop-based power system coming out of Israel is significantly
> cheaper than batteries, but why isn' t anyone interested?
>
> View on www.smithsonianma...
> <http://www.smithsonianmag.com/innovation/a-potato-battery-can-light-up-a-room-for-over-

a-month-180948260/>
>
>
> Preview by Yahoo
>
>

27578. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-16 19:36:55 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 27578

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Leonard's Stuff/Mk.14 Mod 6.bmp
Uploaded by : leonardmeek <lemeek@...>
Description : Mk.14 Mod 6

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Leonard%27s%20Stuff/Mk.14%20Mod%206.bmp

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

leonardmeek <lemeek@...>

27579. Mk.14 Mod 6

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-16 21:12:42 UTC
From: Leonard Meek
Topic: 27579 Message: 27579

Hi guys.

I just posted another evolution of my Mk.14. I put the 956 back in as an untuned RF amp between the tuned RF preamp and the detector. Iknow, I know, a regen detector is not supposed to need a preamp, but it helps when you have a crappy antenna. I'm still fiddling with that audio feedback loop and I don't iknow if I'll keep it. So far, it's working better on 30 & 40 meters and tunes sharply down to about 900 meters. SSB is good but shakey. I'll check tonight and see how well it does on 20 to 10 meters. I don't know who I copied this idea from but it may turn out to be my favorite circuit.

Leonard

27580. rocks

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-16 23:17:55 UTC
From: dulmagedon@...
Topic: 27580 Message: 27580

Thank you Les. Santa arrived today.
donVe3LYX

27581. Re: [regenrx] what is sulfate of zinc and acidulated water and saturated copper sulfate crystals ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-16 07:38:12 UTC
From: Tom Lee
Topic: 27572 Message: 27581

Is your purpose to make a retro battery that you intend to use regularly, or to demonstrate to kids how to make a battery? It's not clear which from your post.

If the latter, there are many simple recipes for batteries that are kid-safe. Just about any combination of two dissimilar metals and some sort of electrolyte will work. I have my freshmen build batteries from pennies, aluminum foil and paper towel disks wetted with electrolytes of their choosing. Coke/Pepsi, ketchup packets from fast food drive-throughs, fruit juices (including fruit), mouthwash, energy drinks, etc. have all sufficed to power up a basic calculator using 3-5 cells. They've even shown that disks sliced from bananas work great with a penny on one side, and aluminum foil on the other. The more ambitious students have opted for an aluminum foil ball surrounding a copper scrub pad, whose larger area allows for much higher currents. With 1-3 cells, these will run a motor (lye-based drain cleaner works great as the electrolyte, but is dangerous, so should only be offered to the older kids with adult supervision; use vinegar with the younger kids), or light up LEDs (these need more cells).

If the former, let us know.

--Cheers
Tom

--
Prof. Thomas H. Lee
Allen Bldg., CIS-205
420 Via Palou Mall
Stanford University
Stanford, CA 94305-4070
http://www-smirc.stanford.edu
650-725-3383 fax

On 1/15/2017 11:23 PM, Rob roomberg@... [regenrx] wrote:
>
> what is sulfate of zinc and acidulated water and saturated copper
> sulfate crystals ?
> Do we have any chemists out there?
>
> I found an old time article how to make a battery and it specified
>
> sulfate of zinc and acidulated water and saturated copper sulfate
> crystals
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> http://www.learnmorsecode.com/regen2/battery02.jpg
>
> The article said to use ZINC SULFATE
> or
> ACIDULATED water.
>
> So I got look up ZINC SULFATE on the web and is says we can buy 220mg
> zinc sulfate capsules...to eat.
> huh?!!??
> edible batteries?
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> Zinc Sulfate (220mg) - 100 Capsules
> Zinc sulfate is an inorganic compound and dietary supplement. As a
> supplement it is used to treat zinc deficiency
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> but hey...it did say "OR"
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> wiki:
> Acidulated water is water that an acid has been added to it, usually
> lemon juice, lime juice or vinegar. Citric acid and ascorbic acid can
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> Acidulated water can be made by combining 1.5 tablespoons vinegar or
> 3 tablespoons lemon juice.
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> First, you need a saturated copper sulfate solution so the crystals
> can form as the liquid evaporates. All you need to do to make the
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> will dissolve. There are two ways to grow the crystals.Apr 26, 2014
> How To Grow Blue Copper Sulfate Crystals - Science Notes and Projects
> https://sciencenotes.org/how-to-grow-blue-copper-sulfate-crystals/
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> OR
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> So is this feasible or would parents be pissed if they knew their kids
> were near these chemicals?
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27582. Re: [regenrx] what is sulfate of zinc and acidulated water and saturated copper sulfate crystals ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-18 07:52:50 UTC
From: Rob
Topic: 27572 Message: 27582

The purpose is to make a retro battery that has enough power to run a tube regen receiver....
to show and tell how they did it 90 years ago.

NOT have kids handle any of the ingrediants.
I've built the pennies/foil cells with my kids 20 year ago.
We never got any USEFUL voltage or amperage. Just lit an LED.

I think I stumbled on this perfect answer:

What Happens in a Battery if Zinc Sulfate Is Mixed With Copper Sulfate?
by Serm Murmson

Chemical reactions can generate electrical energy from the exchange of electrons. A cell that uses the electrical current from a spontaneous chemical reaction is called a galvanic or voltaic cell. A battery is an example of such a cell. A battery is specifically constructed to ensure that its chemical reactions occur in a controlled and reliable manner.

The Nature of the Chemical Reaction
Batteries generate electrical current due to the exchange of electrons in a spontaneous reduction-oxidation, or redox, reaction. In a redox reaction, one element loses electrons: it is oxidized. Another element gains these electrons: it is reduced. The elements used in a battery are selected due to the difference in their oxidation and reduction potentials. For example, zinc loses electrons more readily than copper. A redox reaction will be spontaneous if the difference in the relevant cell potentials is positive: the system will move to release energy.
The Construction of a Battery

The cathode is the site at which reduction occurs in a battery. The anode is the site at which oxidation occurs. In many voltaic cells, the cathode and anode are made of the respective solid metals involved in the redox reaction. In order to provide ions necessary for the chemical reaction to take place, the anode and cathode are suspended in solutions containing the respective metal ions. These two solutions, called electrolytes, are connected via a membrane or barrier. In some cells this is called a salt bridge. The function of the salt bridge is to allow some ions to move while keeping others isolated in the respective electrolytic solutions. Once the anode and cathode are connected via a wire, the electrical potential difference will cause the reaction to occur. Electrons will flow over the wire.
The Zinc and Copper Battery

In a zinc-and-copper battery, the chemical reaction involves the transfer of electrons from solid zinc to copper ions. The zinc is therefore the anode; solid zinc is oxidized. The copper is the cathode; copper ions are reduced. The electrolytic solutions can be zinc sulfate and copper sulfate. When the zinc is oxidized, new zinc ions fall into the solution. When the copper is reduced, copper ions are displaced out of the solution onto the cathode. The negative sulfate ions in the copper sulfate solution can flow across the bridge to account for the creation of positive zinc ions.
The Importance of the Salt Bridge

If the salt bridge were not present, copper ions could come into contact with solid zinc. If this were to happen, both reduction and oxidation would take place at the solid zinc. Copper would build up at the anode, and the electrons would not be able to be harnessed for electrical work. Depending on the extent of the mixture of electrolytes, this could diminish the life of the battery, or even make it completely unusable for electrical work.

On 01/16/2017 02:38 AM, Tom Lee tomlee@... [regenrx] wrote:
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27583. Re: [regenrx] what is sulfate of zinc and acidulated water and saturated copper sulfate crystals ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-18 08:09:57 UTC
From: Tom Lee
Topic: 27572 Message: 27583

Amperage is a direct function of electrode area, so it's just a matter of parallel connection of as many cells as needed to get the job done. The copper scrubpad battery is capable of short-circuit currents of an ampere or so, and has an open-circuit voltage of 1-2V per cell (the exact value depends primarily on the metals you use for the electrodes). These are in line with what other retro formulas yield.

The material you posted is a generic description of all electrochemical cells: You just need two dissimilar metals, and an electrolyte between them to act as a salt bridge. There is nothing particularly magical about zinc sulfate and copper sulfate; it's just that it was used in an early cell (invented by a guy named Daniell in the early 1800s) that happened to emit less hydrogen gas than some earlier designs, and so it saw a lot of use in early telegraphy. Daniell cells typically yield about a volt or so each, so you'd need batteries of several dozen to supply the typical B+ of our retro receivers.

I like the boiled potato-based cell; it is remarkable that boiling has such a dramatically good effect on the resistance. I've never tried to stack enough of them to get to 22 or 45V, but if I can resist the temptation to make french fries, I'll have to give that a go the next time there's a rainy weekend here...

--Cheers,
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> The Construction of a Battery
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27584. Re: [regenrx] what is sulfate of zinc and acidulated water and saturated copper sulfate crystals ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-18 08:22:23 UTC
From: Rob
Topic: 27572 Message: 27584

I have not built a potato cell yet .... I learned about it a few days ago.
My interest in Daniell cells is longevity and overall safety.
Its described as having a long service life. I have no numbers.
I thought if I built a few dozen cells and wooden crates I would get the
desired voltage and amperage levels.

On 01/18/2017 03:09 AM, Tom Lee tomlee@... [regenrx] wrote:
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27585. Re: [regenrx] what is sulfate of zinc and acidulated water and saturated copper sulfate crystals ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-18 08:37:01 UTC
From: Tom Lee
Topic: 27572 Message: 27585

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> Its described as having a long service life. I have no numbers.
> I thought if I built a few dozen cells and wooden crates I would get
> the desired voltage and amperage levels.
>
>
>
>
>
>
>
> On 01/18/2017 03:09 AM, Tom Lee tomlee@... [regenrx] wrote:
>>
>> Amperage is a direct function of electrode area, so it's just a
>> matter of parallel connection of as many cells as needed to get the
>> job done. The copper scrubpad battery is capable of short-circuit
>> currents of an ampere or so, and has an open-circuit voltage of 1-2V
>> per cell (the exact value depends primarily on the metals you use for
>> the electrodes). These are in line with what other retro formulas yield.
>>
>> The material you posted is a generic description of all
>> electrochemical cells: You just need two dissimilar metals, and an
>> electrolyte between them to act as a salt bridge. There is nothing
>> particularly magical about zinc sulfate and copper sulfate; it's just
>> that it was used in an early cell (invented by a guy named Daniell in
>> the early 1800s) that happened to emit less hydrogen gas than some

>> earlier designs, and so it saw a lot of use in early telegraphy.
>> Daniell cells typically yield about a volt or so each, so you'd need
>> batteries of several dozen to supply the typical B+ of our retro
>> receivers.
>>
>> I like the boiled potato-based cell; it is remarkable that boiling
>> has such a dramatically good effect on the resistance. I've never
>> tried to stack enough of them to get to 22 or 45V, but if I can
>> resist the temptation to make french fries, I'll have to give that a
>> go the next time there's a rainy weekend here...
>>
>>
>> --Cheers,
>> Tom
>>
>> On 1/17/2017 11:52 PM, Rob roomberg@... [regenrx] wrote:
>>>
>>> The purpose is to make a retro battery that has enough power to run
>>> a tube regen receiver....
>>> to show and tell how they did it 90 years ago.
>>>
>>> NOT have kids handle any of the ingrediants.
>>> I've built the pennies/foil cells with my kids 20 year ago.
>>> We never got any USEFUL voltage or amperage. Just lit an LED.
>>>
>>> I think I stumbled on this perfect answer:
>>>
>>> What Happens in a Battery if Zinc Sulfate Is Mixed With Copper Sulfate?
>>> by Serm Murmson
>>>
>>> Chemical reactions can generate electrical energy from the exchange
>>> of electrons. A cell that uses the electrical current from a
>>> spontaneous chemical reaction is called a galvanic or voltaic cell.
>>> A battery is an example of such a cell. A battery is specifically
>>> constructed to ensure that its chemical reactions occur in a
>>> controlled and reliable manner.
>>>
>>> The Nature of the Chemical Reaction
>>> Batteries generate electrical current due to the exchange of
>>> electrons in a spontaneous reduction-oxidation, or redox, reaction.
>>> In a redox reaction, one element loses electrons: it is oxidized.
>>> Another element gains these electrons: it is reduced. The elements
>>> used in a battery are selected due to the difference in their
>>> oxidation and reduction potentials. For example, zinc loses
>>> electrons more readily than copper. A redox reaction will be
>>> spontaneous if the difference in the relevant cell potentials is
>>> positive: the system will move to release energy.
>>> The Construction of a Battery
>>>
>>> The cathode is the site at which reduction occurs in a battery. The

>>> anode is the site at which oxidation occurs. In many voltaic cells,
>>> the cathode and anode are made of the respective solid metals
>>> involved in the redox reaction. In order to provide ions necessary
>>> for the chemical reaction to take place, the anode and cathode are
>>> suspended in solutions containing the respective metal ions. These
>>> two solutions, called electrolytes, are connected via a membrane or
>>> barrier. In some cells this is called a salt bridge. The function of
>>> the salt bridge is to allow some ions to move while keeping others
>>> isolated in the respective electrolytic solutions. Once the anode
>>> and cathode are connected via a wire, the electrical potential
>>> difference will cause the reaction to occur. Electrons will flow
>>> over the wire.
>>> The Zinc and Copper Battery
>>>
>>> In a zinc-and-copper battery, the chemical reaction involves the
>>> transfer of electrons from solid zinc to copper ions. The zinc is
>>> therefore the anode; solid zinc is oxidized. The copper is the
>>> cathode; copper ions are reduced. The electrolytic solutions can be
>>> zinc sulfate and copper sulfate. When the zinc is oxidized, new zinc
>>> ions fall into the solution. When the copper is reduced, copper ions
>>> are displaced out of the solution onto the cathode. The negative
>>> sulfate ions in the copper sulfate solution can flow across the
>>> bridge to account for the creation of positive zinc ions.
>>> The Importance of the Salt Bridge
>>>
>>> If the salt bridge were not present, copper ions could come into
>>> contact with solid zinc. If this were to happen, both reduction and
>>> oxidation would take place at the solid zinc. Copper would build up
>>> at the anode, and the electrons would not be able to be harnessed
>>> for electrical work. Depending on the extent of the mixture of
>>> electrolytes, this could diminish the life of the battery, or even
>>> make it completely unusable for electrical work.
>>>
>>>
>>>
>>>
>>>
>>>
>>> On 01/16/2017 02:38 AM, Tom Lee tomlee@... [regenrx] wrote:
>>>>
>>>> Is your purpose to make a retro battery that you intend to use
>>>> regularly, or to demonstrate to kids how to make a battery? It's
>>>> not clear which from your post.
>>>>
>>>> If the latter, there are many simple recipes for batteries that are
>>>> kid-safe. Just about any combination of two dissimilar metals and
>>>> some sort of electrolyte will work. I have my freshmen build
>>>> batteries from pennies, aluminum foil and paper towel disks wetted
>>>> with electrolytes of their choosing. Coke/Pepsi, ketchup packets
>>>> from fast food drive-throughs, fruit juices (including fruit),

>>>> mouthwash, energy drinks, etc. have all sufficed to power up a
>>>> basic calculator using 3-5 cells. They've even shown that disks
>>>> sliced from bananas work great with a penny on one side, and
>>>> aluminum foil on the other. The more ambitious students have opted
>>>> for an aluminum foil ball surrounding a copper scrub pad, whose
>>>> larger area allows for much higher currents. With 1-3 cells, these
>>>> will run a motor (lye-based drain cleaner works great as the
>>>> electrolyte, but is dangerous, so should only be offered to the
>>>> older kids with adult supervision; use vinegar with the younger
>>>> kids), or light up LEDs (these need more cells).
>>>>
>>>> If the former, let us know.
>>>>
>>>> --Cheers
>>>> Tom
>>>>
>>>> --
>>>> Prof. Thomas H. Lee
>>>> Allen Bldg., CIS-205
>>>> 420 Via Palou Mall
>>>> Stanford University
>>>> Stanford, CA 94305-4070
>>>> http://www-smirc.stanford.edu
>>>> 650-725-3383 fax
>>>> On 1/15/2017 11:23 PM, Rob roomberg@... [regenrx] wrote:
>>>>>
>>>>> what is sulfate of zinc and acidulated water and saturated copper
>>>>> sulfate crystals ?
>>>>> Do we have any chemists out there?
>>>>>
>>>>> I found an old time article how to make a battery and it specified
>>>>>
>>>>> sulfate of zinc and acidulated water and saturated copper sulfate
>>>>> crystals
>>>>>
>>>>> http://www.learnmorsecode.com/regen2/battery02.jpg
>>>>>
>>>>> The article said to use ZINC SULFATE
>>>>> or
>>>>> ACIDULATED water.
>>>>>
>>>>> So I got look up ZINC SULFATE on the web and is says we can buy
>>>>> 220mg zinc sulfate capsules...to eat.
>>>>> huh?!!??
>>>>> edible batteries?
>>>>>
>>>>> Zinc Sulfate (220mg) - 100 Capsules
>>>>> Zinc sulfate is an inorganic compound and dietary supplement. As a
>>>>> supplement it is used to treat zinc deficiency
>>>>>

>>>>>
>>>>> but hey...it did say "OR"
>>>>> and when I look up acidulated water it said
>>>>>
>>>>> wiki:
>>>>> Acidulated water is water that an acid has been added to it,
>>>>> usually lemon juice, lime juice or vinegar. Citric acid and
>>>>> ascorbic acid can also be used.
>>>>>
>>>>> Acidulated water can be made by combining 1.5 tablespoons vinegar
>>>>> or 3 tablespoons lemon juice.
>>>>>
>>>>> sooooo..... OK... this doesn't sound real toxic or dangerous to
>>>>> show and tell kids battery chemistry....
>>>>>
>>>>> AND THEN
>>>>> there is the saturated copper sulfate....
>>>>> which is readily available at th eharware store
>>>>> ROOT KILL copper sulfate pentahydrate 99%
>>>>> and instructions on the web say:
>>>>>
>>>>> First, you need a saturated copper sulfate solution so the
>>>>> crystals can form as the liquid evaporates. All you need to do to
>>>>> make the solution is to stir copper sulfate into very hot water
>>>>> until no more will dissolve. There are two ways to grow the
>>>>> crystals.Apr 26, 2014
>>>>> How To Grow Blue Copper Sulfate Crystals - Science Notes and Projects
>>>>> https://sciencenotes.org/how-to-grow-blue-copper-sulfate-crystals/
>>>>>
>>>>> OR
>>>>> just buy 10 pounds of crystals from a seed supply house for $32.
>>>>>
>>>>> So is this feasible or would parents be pissed if they knew their
>>>>> kids were near these chemicals?
>>>>>
>>>>
>>>
>>
>
>

27586. Tater volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-18 13:02:05 UTC
From: dulmagedon@...
Topic: 27586 Message: 27586

Always curious of such things I grabbed a raw tater and stuck it with a u shaped copper wire. I took a removed blade of a small variable cap I had modified (aluminum) an stuck it in between. .624 volts. Then I took a nail (steel) and tried it instead of the aluminum . .454 volts. Now I wonder about washing soda (Arm and Hammer) I have used it for cleaning filthy automotive parts (sort of reverse electrolysis)but never check the voltage produced with dissimilar metals. I applaud all such experiments.
donVe3LYX

27587. home made batteries

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-18 14:47:10 UTC
From: wb9kzy@...
Topic: 27587 Message: 27587

When I was a kid my favorite book by Alfred P. Morgan didn't involve radio, it was titled:

Adventures in Electrochemistry

As I recall, lots of home made battery (cell) ideas in that book - I was most interested in the Nickel plating experiment though.

Hopefully this book can still be borrowed from the library, his used books command astounding prices.

73,

Chuck, WB9KZY

27588. Re: [regenrx] home made batteries

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-18 20:21:56 UTC
From: Rob
Topic: 27587 Message: 27588

Thanks
bought it
Amazon...., $18

On 01/18/2017 09:47 AM, wb9kzy@... [regenrx] wrote:
>
> When I was a kid my favorite book by Alfred P. Morgan didn't involve
> radio, it was titled:
>
> Adventures in Electrochemistry
>
> As I recall, lots of home made battery (cell) ideas in that book - I
> was most interested in the Nickel plating experiment though.
>
> Hopefully this book can still be borrowed from the library, his used
> books command astounding prices.
>
> 73,
>
> Chuck, WB9KZY
>
>
>

27589. Re: [regenrx] what is sulfate of zinc and acidulated water and saturated copper sulfate crystals ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-18 21:04:47 UTC
From: Will Kimber
Topic: 27572 Message: 27589

How about using NiFe cells? Iron outer case/electrode with nickle
plated electrode enclosed in it. Potassium Hydroxide electrolyte.

1.2volts though but rechargeable.

Cheers,

William

On 01/18/2017 08:52 PM, Rob roomberg@... [regenrx] wrote:
>
> The purpose is to make a retro battery that has enough power to run a
> tube regen receiver....
> to show and tell how they did it 90 years ago.
>

27590. Re: [regenrx] what is sulfate of zinc and acidulated water and saturated copper sulfate crystals ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-19 00:24:06 UTC
From: Bill Cromwell
Topic: 27572 Message: 27590

Hi Bill,

Isn't that electrolyte known as caustic or something like that. Probably not any more dangerous than the sulphuric acid in the lead-acid batteries we all know and love. But not something for kids to play with.

73,

Bill KU8H

t'other Bill

On 01/18/2017 04:04 PM, Will Kimber zl1tao@... [regenrx] wrote:
>
> How about using NiFe cells? Iron outer case/electrode with nickle
> plated electrode enclosed in it. Potassium Hydroxide electrolyte.
>
> 1.2volts though but rechargeable.
>
> Cheers,
>
> William
>
>
> On 01/18/2017 08:52 PM, Rob roomberg@... [regenrx] wrote:
>>
>> The purpose is to make a retro battery that has enough power to run a
>> tube regen receiver....
>> to show and tell how they did it 90 years ago.
>>
>>
>>

--
bark less - wag more

27591. Re: [regenrx] what is sulfate of zinc and acidulated water and saturated copper sulfate crystals ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-19 01:30:05 UTC
From: Robert Nickels
Topic: 27572 Message: 27591

Regarding electrochemistry, everyone probably remembers the Burgess Battery company and it's well known red and black-white striped batteries that were made here in my town of Freeport IL. Fewer probably know that Dr. C.F. Burgess was a noted electrochemist who spent his life consulting and inventing in the field as well as running the company that bears his name. At one time the Department of Electrochemistry at the University of Wisconsin bore his name, and the original battery company he worked with, the French Battery Company, lives on as one of the major battery manufacturers: Ray-O-Vac - a term trademarked in 1921 for batteries used in vacuum tube radios.

73, Bob W9RAN

27592. Assistance

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-19 03:57:25 UTC
From: Brian Ford
Topic: 27592 Message: 27592

blockquote, div.yahoo_quoted { margin-left: 0 !important; border-left:1px #715FFA solid !important; padding-left:1ex !important; background-color:white !important; } I finished putting together a one tube regen this evening. And unlike the other attempts in the past this one howled, squealed and warbled.
Once I thought I heard a couple of words but it may have been wishful thinking.
Anyhow, I would like to tame this beast down and actually hear coherent noises.
The circuit is the WW2 prison camp RX with the 6sk7, as seen on n6cc's blog page. Already got I think I may need to alter the number of turns on the coil.
The grid leak I used is 100pf/ 2.2 meg. It was already made and in the box.
So far I've burned out one pot, may need to add a resister in series.

Keith Kf4tap

Sent from Yahoo Mail for iPad

27593. Re: [regenrx] home made batteries

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-19 17:53:07 UTC
From: Russ Williams
Topic: 27587 Message: 27593

Yes they do commando high prices. I am still looking for a good original "Boy's First Book of Radio and Electronics". That book started me down the path of regens in 1968.

Russ, KW6T.

From: "wb9kzy@arrl.net [regenrx]" <regenrx@yahoogroups.com>
To: regenrx@yahoogroups.com
Sent: Wednesday, January 18, 2017 6:47 AM
Subject: [regenrx] home made batteries

When I was a kid my favorite book by Alfred P. Morgan didn't involve radio, it was titled:

Adventures in Electrochemistry

As I recall, lots of home made battery (cell) ideas in that book - I was most interested in the Nickel plating experiment though.

Hopefully this book can still be borrowed from the library, his used books command astounding prices.

73,

Chuck, WB9KZY

27594. Alfred P. Morgan

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-20 13:42:39 UTC
From: wb9kzy@...
Topic: 27587 Message: 27594

Russ -

I did get a copy a long time ago on Ebay but as with most former library books, it wasn't in super great condition.

Dave at the American Radio History site now has some of the Alfred P. Morgan books to download:

BOOKSHELF Alfred Morgan http://americanradiohistory.com/Bookshelf_Morgan.htm

BOOKSHELF Alfred Morgan http://americanradiohistory.com/Bookshelf_Morgan.htm Bookshelf: Books by Alfred Morgan

View on americanradiohistory.com http://americanradiohistory.com/Bookshelf_Morgan.htm Preview by Yahoo

73,

Chuck, WB9KZY

27595. Re: [regenrx] Alfred P. Morgan

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-20 16:08:15 UTC
From: Rob
Topic: 27587 Message: 27595

THANK YOU

Got them all.

This is the kind of stuff that should be required reading instead of
Cather in The Rye and Flowers for Algenon.

On 01/20/2017 08:42 AM, wb9kzy@... [regenrx] wrote:
>
> Russ -
>
> I did get a copy a long time ago on Ebay but as with most former
> library books, it wasn't in super great condition.
>
> Dave at the American Radio History site now has some of the Alfred P.
> Morgan books to download:
>
> BOOKSHELF Alfred Morgan
> <http://americanradiohistory.com/Bookshelf_Morgan.htm>
>
>
>
>
> BOOKSHELF Alfred Morgan
> <http://americanradiohistory.com/Bookshelf_Morgan.htm>
> Bookshelf: Books by Alfred Morgan
>
> View on americanradiohistory.com
> <http://americanradiohistory.com/Bookshelf_Morgan.htm>
>
> Preview by Yahoo
>
> 73,
>
> Chuck, WB9KZY
>

27596. Re: Bayou Jumper

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-20 20:07:28 UTC
From: n0nb@...
Topic: 27566 Message: 27596

Having just build a Bayou Jumper and gotten it working this past weeke, the regen is very smooth and has plenty of sensitivity for the 40m band locally. Mine covers from 7.003 to 7.143 MHz so a steady and slow hand is required for careful tuning as it uses a standard 270 degree potentiometer. One other builder has fitted a ten turn pot to his to slow the tuning rate.

There is a Bayou Jumper Yahoo group for further discussion about it. A second run of kits was just announced this week.

27597. RE: [regenrx] Re: Bayou Jumper

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-22 02:31:44 UTC
From: Hubert Miller
Topic: 27566 Message: 27597

I noticed from the photo that the screw holes in the corner of the panel are not used. I guess that's dependent on the internals of the wooden carry box used.
Still, this is a finish item that looks hokey. I would try to fill those holes with screws, even if they don't do anything. To my eye, pan-head slotted screws look
better than the shiny Phillips used to hold the panel in the photo.
I think the hinges on the wooden box may become a problem also, if the lid is hanging open. I think eventually the weight of the unsupported front door
will eventually tear the hinges loose or crack the wood. If i had designed the set, i would have changed the format from 'landscape' (horizontal) to
'protrait' (vertical). That way the door could be opened and the set operated in that position with no weight stress on the hinges.
What do you think?
-Hue

27598. Re: [regenrx] Re: Bayou Jumper

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-22 03:17:19 UTC
From: David Martin
Topic: 27566 Message: 27598

I think the person that took that photo hadn't at that point put the screws in the 4 corners. The screws are required otherwise the radio will fall out of the case if turned upside down.

Probably the person taking the picture didn't think anybody would nit-pick such a trivial detail in a photo and chose not to replace the photo with screws installed.

The lid is not that heavy and I seriously doubt the hinge mounts will be ripped from the case in normal use, even over time, unless of course you decide to set your 5 pound roll of solder on the lid while open, but I suspect the radio will tip over first.

Beside the original "Paraset" construction was 'landscape' NOT 'portrait.

NA1MH

On 1/21/2017 20:31, Hubert Miller kargo_cult@... [regenrx] wrote:
> I noticed from the photo that the screw holes in the corner of the
> panel are not used. I guess that's dependent on the internals of the
> wooden carry box used.
> Still, this is a finish item that looks hokey. I would try to fill
> those holes with screws, even if they don't do anything. To my eye,
> pan-head slotted screws look
> better than the shiny Phillips used to hold the panel in the photo.
> I think the hinges on the wooden box may become a problem also, if the
> lid is hanging open. I think eventually the weight of the unsupported
> front door
> will eventually tear the hinges loose or crack the wood. If i had
> designed the set, i would have changed the format from 'landscape' (
> horizontal) to
> 'protrait' (vertical). That way the door could be opened and the set
> operated in that position with no weight stress on the hinges.
> What do you think?
> -Hue
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David Martin - NA1MH <https://www.qrz.com/lookup/na1mh> - Mountain Home,
Ar. ----------

27599. New member

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-20 20:35:48 UTC
From: SHARKFINGUY@...
Topic: 4096 Message: 27599

Hello everyone. I just joined the group yesterday and received an email that says I have to send this email to be able to send messages to the group. I have been a Ham operator since 1981 and presently hold the Extra class license. My call sign is N1BUS. I have built a few regenerative receivers in my time, mostly for the AM broadcast band. My latest project is a 40 meter regenerative receiver using a 3 part coil cosisting of a main tuning winding, tickler coil and antenna coil. This worked well on the breadboard and I want to build it up permanent on a wooden base.

27600. RE: [regenrx] Re: Bayou Jumper

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-22 03:47:54 UTC
From: Hubert Miller
Topic: 27566 Message: 27600

Okay, but for the photo the club should have put in all the screws; just does not take that long, does it?
I base the comment about the light-duty hinges on my experience with this kind of light-duty storage box.
It’s not only weight, but bounce or impact of fully opening the lid to resting position, that stresses the hinge area.
It’s not one event, but accumulation of repeated stresses that does it.
Yes, i understand the box is an aftermarket item and not designed by the 4SQRP club.
I don’t know what the original ‘Paraset’ was like in this regard, and i don’t want to look up any photos of the actual thing right now.
(I have a couple books with period photos.)
The PRC-5 agent radio had a hinge that could be slid apart to completely disconnect the lid.
I have ordered one of the 2017 Parasets.
-Hue

27601. Re: [regenrx] Re: Bayou Jumper

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-22 04:31:02 UTC
From: David Martin
Topic: 27566 Message: 27601

REALLY !! ????

Sorry I ever joined this group. Are all the members nit-pickers ?

I'll go unsubscribe from the group right now.

Ya'll have fun nit-picking stuff.

On 1/21/2017 21:47, Hubert Miller kargo_cult@... [regenrx] wrote:
>
> Okay, but for the photo the club should have put in all the screws;
> just does not take that long, does it?
>
> I base the comment about the light-duty hinges on my experience with
> this kind of light-duty storage box.
>
> It’s not only weight, but bounce or impact of fully opening the lid to
> resting position, that stresses the hinge area.
>
> It’s not one event, but accumulation of repeated stresses that does it.
>
> Yes, i understand the box is an aftermarket item and not designed by
> the 4SQRP club.
> I don’t know what the original ‘Paraset’ was like in this regard, and
> i don’t want to look up any photos of the actual thing right now.
>
> (I have a couple books with period photos.)
>
> The PRC-5 agent radio had a hinge that could be slid apart to
> completely disconnect the lid.
>
> I have ordered one of the 2017 Parasets.
>
> -Hue
>
>

--
David Martin - NA1MH <https://www.qrz.com/lookup/na1mh> - Mountain Home,
Ar. ----------

27602. RE: [regenrx] Re: Bayou Jumper

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-22 04:32:54 UTC
From: Hubert Miller
Topic: 27566 Message: 27602

Did you have a real bad day, Dave?
Sorry!!!
-Hue

27603. "the single tube" for transmit and receive

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-22 05:26:02 UTC
From: Hubert Miller
Topic: 27603 Message: 27603

I thought i'd mention this, as i (at least...) found it interesting.
Dave Stinson, on the milsurplus group, reported on his restoration a U.S. Army transceiver, type BC-9, dated 1921.
This small portable CW set uses an oscillating detector followed by a couple audio stages. It used a large loop
antenna mounted on the radio box. For transmit, the oscillator B+ voltage was simply boosted from 90 volts
to 170 volts - no other switching executed, i believe. (Fits the 1920s "blooper" epithet.) The output he measured
was about 1 watt.
What Dave found, and what perplexes him at this point, is that on 'transmit', the frequency drops about 15 kHz,
making it nigh impossible to use on the hambands without a pre-arranged contact.
My own thinking was, if you are only using two BC-9 together, they can work even with this t-r offset. I also kind
of doubt the original 01A tube drew that kind of plate current, but i may be wrong on this. So my conclusion is
that the offset is not that great if using the original tube type and not a more modern power tube (triode connected
6AQ5) and that second, the Army used these BC-9 to BC-9 so the offset was workable. I can cite a couple other
later Army sets of the late 1930s that had frequency offsets or did not have a BFO offset so you'd have to tune the
sets to slightly different freqs anyway.

This reminded me of some posts we had a while back about the 'single tube transceiver' but i don't recall any
problem with a frequency shift being mentioned.
-Hue

27604. Russian regen kit "Mohican"

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-22 06:24:45 UTC
From: Hubert Miller
Topic: 27604 Message: 27604

Did you see this regen receiver board kit from Russia?
Seems like even after the demise of the big famous kit companies, there's more regen kits out than there has been since the early 1950s maybe.
http://www.ebay.com/itm/282285217927?rmvSB=true

There's 3 videos.
The 40M SSB reception video shows it really needs a metal front panel.
The 20M CW kind of shifted freq a little even with no human intervention - impossible to tell, i think, whether a temperature effect or maybe something inherent,
like backlash effect, in a variable, like the regen pot.
Does not include the air variable capacitor.
Says it's called "Mohican" in Russia. Odd. Anyway this may be the "Last of the Mohicans" even in Russia.
-Hue

27605. Re: Russian regen kit "Mohican"

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-22 07:46:52 UTC
From: Mike Dice
Topic: 27604 Message: 27605

He just made a copy of the MFJ-8100 PCB and included some of the components. He also has a board kit for sale which is a copy of the Ten Tec 1253.

27606. Re: [regenrx] "the single tube" for transmit and receive

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-22 09:26:22 UTC
From: Richard
Topic: 27603 Message: 27606

I think the only to work with frequency shift is to re-tune for transmit
and receive. If not, the second station will be twice as far off
frequency from the first station, and no contact. Well, you could use
two sets, one to receive and one to transmit.

Richard, AA1P

On 01/22/2017 12:26 AM, Hubert Miller kargo_cult@... [regenrx] wrote:
>
> I thought i'd mention this, as i (at least...) found it interesting.
> Dave Stinson, on the milsurplus group, reported on his restoration a
> U.S. Army transceiver, type BC-9, dated 1921.
> This small portable CW set uses an oscillating detector followed by a
> couple audio stages. It used a large loop
> antenna mounted on the radio box. For transmit, the oscillator B+
> voltage was simply boosted from 90 volts
> to 170 volts - no other switching executed, i believe. (Fits the
> 1920s "blooper" epithet.) The output he measured
> was about 1 watt.
> What Dave found, and what perplexes him at this point, is that on
> 'transmit', the frequency drops about 15 kHz,
> making it nigh impossible to use on the hambands without a
> pre-arranged contact.
> My own thinking was, if you are only using two BC-9 together, they can
> work even with this t-r offset. I also kind
> of doubt the original 01A tube drew that kind of plate current, but i
> may be wrong on this. So my conclusion is
> that the offset is not that great if using the original tube type and
> not a more modern power tube (triode connected
> 6AQ5) and that second, the Army used these BC-9 to BC-9 so the offset
> was workable. I can cite a couple other
> later Army sets of the late 1930s that had frequency offsets or did
> not have a BFO offset so you'd have to tune the
> sets to slightly different freqs anyway.
>
> This reminded me of some posts we had a while back about the 'single
> tube transceiver' but i don't recall any
> problem with a frequency shift being mentioned.
> -Hue
>
>

27607. Re: "the single tube" for transmit and receive

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-22 11:53:34 UTC
From: dulmagedon@...
Topic: 27603 Message: 27607

I have done this a few times. The first was posted and detailed here some years ago. I am sure the photos are still here. The last I built was just last fall when I did my take on the Weskit . Here is how it is done. And PSE note this is how it is done not how it might be done. On the first one I added a small padding cap into the receive circuit enough to cover the shift in tube voltage and consequentially freq. It worked seemingly fairly well but I did not have enough stomp or output to make it a useful transmitter from my place which is some distance from other Cw operators so it worked but if you wish to dismiss it I can live with that. When I built the last I used a seperate slug tuned coil for TX and receive and set each so it would be right on. Then I even went a step farther and pulled a plate from the ganged daul section tuning cap in the RX section and added a bandspread variable with two plates in parallel with that section, normally set about 1/2 way to give the same value as before more or less but also to give me the ability to RIT without changing transmit freq. It couldn't work any better. I can find you if you are sideways a bit up or down or can work you easily if you are right on but can do that without touching my transmit freq. So either method works. BTW where did Dave Stinson post this? It sounds like a very interesting radio. Hartley Regens BTW lend themselves very well to be coming one tube transceivers. On the first one I used a 56 tube and later added a PA which was a audio PA on RX and a RF PA on Transmit. On the last one I used a dual triode with different characteristics BUT only because I wanted a more powerful TX . Nothing would prevent doing it with one as well since only one section is powered anyway. The last is a real fun and practical radio and I have enjoyed using it on 40M quit a bit. The first has been repurposed after the last one was up and running. It only takes one dual gang dual throw switch to effect it. Transceivers are fun projects.
donVe3LYX

27608. Re: [regenrx] New member

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-22 16:09:44 UTC
From: Russ Williams
Topic: 4096 Message: 27608

Welcome to the world of regens! Are you using tube(s) or transistor(s) for your 40 meter project?
Russ, kw6t

From: " [regenrx]" <regenrx@yahoogroups.com>
To: regenrx@yahoogroups.com
Sent: Friday, January 20, 2017 12:35 PM
Subject: [regenrx] New member

Hello everyone. I just joined the group yesterday and received an email that says I have to send this email to be able to send messages to the group. I have been a Ham operator since 1981 and presently hold the Extra class license. My call sign is N1BUS. I have built a few regenerative receivers in my time, mostly for the AM broadcast band. My latest project is a 40 meter regenerative receiver using a 3 part coil cosisting of a main tuning winding, tickler coil and antenna coil. This worked well on the breadboard and I want to build it up permanent on a wooden base.

27609. Re: [regenrx] New member

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-22 17:56:51 UTC
From: SHARKFINGUY@...
Topic: 4096 Message: 27609

Hi Russ and the group, I am planning to use transistors for it. I had breadboarded it a couple years ago using an audio transformer in the collector circuit to take off the audio. However, after reading some of Walter kitchin's papers I will try using an rf choke and low pass filter method.

27610. RE: [regenrx] Re: "the single tube" for transmit and receive

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-22 21:18:43 UTC
From: Hubert Miller
Topic: 27603 Message: 27610

Dave Stinson posted all that on the milsurplus group (milsurplus@mailman.qth.net) .
His declared rule, and with good reason for a 1921 antique, is NO circuit modification, so i think he's stuck with it as-is !
I had one of those BC-9 sets back around 1980, but the lack of the large (maybe 5 foot wide by 3 foot tall) loops and the
lack of tubes convinced me that i couldn't make any progress toward actually using it. The instructions spoke about
hand-selecting a tube that would work at that "high frequency" , 3-4 MHz, and that was another hurdle.

For some reason i thought you had solved the frequency offset thing easily but now i see that you actually put quite a
lot of thought into it.
-H

27611. Re: [regenrx] New member

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-22 22:20:42 UTC
From: SHARKFINGUY@...
Topic: 4096 Message: 27611

I made an error. It should be Charles Kitchin.

27612. RE: [regenrx] Re: "the single tube" for transmit and receive

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-23 04:24:36 UTC
From: dulmagedon@...
Topic: 27603 Message: 27612

Somebody told me it wouldn't work. My XYL would tell them "Don't say that to Don . It is like waving a red flag in front of a bull." (I heard her tell one of my engine customers that once) I am intriqued by the fact that other then earphones and a regen control here is no real difference in the circuits.(TX or RX) I have a schamtic for a 1920s one here somewhere someone sent me back then. So the concept was not unheard of. I know nothing of the radio you spoke of. I built the POW regen in the birdhouse and could make it Transmit or receive simply by playing with the B+ voltage and the freq variation was not significant but I didnt go from 45 to 90 volts ether. Probably 68 to 90 if memory serves me. The 56 tube one was not real bad but enough to be a pain so I added a padder to it . I had it here for several ears. In fact I think it got repurposed last year about this time as I used the repurposed rig on the Linc Cundall event. The tubes are still mounted on the same base but the regen design has been changed as have the tuning coil and variable caps. It would not be any difficulty to work cross band anyway. Used to work DX that way in the 1980s. When I did the last one the Weskit inspired one I was determined to have a very workable station when done and I do. Depending on the circuit the difference in freq is not necesarily that great and could be in some cases easily compensated for with a gimmick cap (twisted insulated pair) Real interesting stuff to play with. The other end of this extreme is the VHF simple rigs of the 1940s which literally were just glorified supergennies. My No 19 Ws has a 235mcs B transceiver that doesn't have enough parts in to spit. Obviously it worked and on phone too. I would love to see that circuit . I might be tempted to dust of another 01A and try my hand at it.
In my shack a regen is an under powered Hartley or Armstrong and a TX is an overpowered Hartley or Armstrong.
donve3LYX

27613. Re: "the single tube" for transmit and receive

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-23 13:54:13 UTC
From: buzzgiles@...
Topic: 27603 Message: 27613

Hi Guys,

This is an interesting topic. Does anyone have a BC-9 transceiver schematic?

73 de Gary,KF9CM

27614. FW: [Milsurplus] Smart People: BC-9A Opinions Needed

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-23 20:54:01 UTC
From: Hubert Miller
Topic: 27614 Message: 27614

-----Original Message-----
From: Milsurplus [mailto:milsurplus-bounces@mailman.qth.net] On Behalf Of David Stinson
Sent: Tuesday, January 3, 2017 6:55 PM

Subject: Re: [Milsurplus] Smart People: BC-9A Opinions Needed

With many thanks to our members, I've received the correct BC-9A schematic (Thanks Dave Hollander):
https://goo.gl/photos/QAiuWy7SsmxbEGmL8

A detailed technical PDF (Thanks Ray Chase):
https://drive.google.com/file/d/0B1zXYo8XYQS8c24yVGViMWM3cFk/view?usp=sharing

And other excellent information from other members.
Our people are the best.
Looking forward to the process of reviving this century-old-warrior.

It really intrigues me to know that when this radio was in use by the 3rd Battalion of the 12th Infantry Regiment, thousands of veterans of The War for Southern Independence were still living.

GL OM ES 73 DE Dave AB5S

27615. FW: Box for 'Bayou Jumper'

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-23 20:57:41 UTC
From: Hubert Miller
Topic: 27615 Message: 27615

Here’s a note my friend John, AA7W, sent me:

From: JOHN
Sent: Monday, January 23, 2017 12:51 PM
To: Hue Miller
Subject: Box

Researched some more on that 4-state QRP rig. Looked up the SKU number for the Hobby Lobby wood box(s). Based on that info, you have to buy a three box kit for about $23 to get the small one (7.75"x5.5x3.25), so that is kind of a rip off when you can get individual boxes for under $10.

Going to stop at the new Hobby Lobby store this Saturday and see if there are any better options then buying three to get one.

My neighbor is a wood worker and could easily make better boxes out of Oak or other hard woods. Still, I'm going to get a pine version as an example for him. I would also add the brass corner bumpers that were common at the time.

27616. Re: FW: [Milsurplus] Smart People: BC-9A Opinions Needed

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-23 22:57:41 UTC
From: dulmagedon@...
Topic: 27614 Message: 27616

Thank you and Thank Dave as well. Very interesting.
donVe3LYX

27617. RE: [regenrx] Re: FW: [Milsurplus] Smart People: BC-9A Opinions Needed

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-23 23:06:28 UTC
From: Hubert Miller
Topic: 27614 Message: 27617

Dave Stinson has posted about some interesting restorations. In one transmitter, he replaced the $$$$ type 10Y tubes with triode-wired 6AQ5.
As you may know, some old power triodes have really escalated in price, because the “glass audio” fans cherish them.

Dave also was among the first to use those programmable CMOS oscillators to replace expensive crystals in old gear.

One interesting thing you may have noticed is that on the BC-9, the telegraph key folds down from the front panel.
I have a later “loop set” that uses a single type 10 transmitter and 3 type 30 in oscillating detector receiver.
An Army vet who had used the set in training told me that to get additional range, they would use large alligator clips to tap onto the loop
antenna and attach a dipole antenna. This would boost the range from 5-10 miles to about 35, daytime.
As with Dave, i do not have the large loop antenna. He said he would assemble the antenna from copper tubing.
-Hue

27618. Re: [regenrx] FW: Box for 'Bayou Jumper'

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-23 23:28:43 UTC
From: Jim Pruitt
Topic: 27615 Message: 27618

Hue, your friend found one of the problems with the Hobby Lobby distribution. If you go to HobbyLobby.com and search for 662536S (the SKU# for the box we are looking for) you will find nothing! If you search for 662536 it will take you here:

http://www.hobbylobby.com/Crafts-Hobbies/Wood-Crafting/Unfinished-Wood/Wood-Rectangle-Box-Set-with-Silver-Handle/p/25426

If you mail order you cannot buy a particular box out of the set. If you walk into the store you will find that each piece is sold individually but all three pieces add up to the $23.97 price.

What I find odd is that last year Hobby Lobby would have half of the store on sale at 50% off and next week would be the other half of the store. Now it appears to be 30% on some things and 40% on others. If you go to their website you can get a 40% off one item. Since your friend has a local retail store he can walk in there and buy just the 662536 (7 3/4" x 3 1/4" x 5 1/2") small box for $5.99 this week or $3.60 next week or use his online coupon of 40% off one non sale item.

The other thing that annoys me about Hobby Lobby's distribution is that you cannot mail order the item and have it shipped to a local Hobby Lobby store free. Everything comes from their Oklahoma City distribution center even for us here on the left coast.

Hobby Lobby has other wooden boxes too as does Michael's and I am sure many other craft stores or as your friend mentioned it should not be hard to make a box of the 7 3/4" x 3 1/4" x 5 1/2" box for the Bayou Jumper.

Good luck.

Jim Pruitt

On Mon, Jan 23, 2017 at 12:57 PM, Hubert Miller kargo_cult@... [regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> Here’s a note my friend John, AA7W, sent me:
>
>
>
> *From:* JOHN
> *Sent:* Monday, January 23, 2017 12:51 PM
> *To:* Hue Miller
> *Subject:* Box
>

>
>
> Researched some more on that 4-state QRP rig. Looked up the SKU number
> for the Hobby Lobby wood box(s). Based on that info, you have to buy a
> three box kit for about $23 to get the small one (7.75"x5.5x3.25), so that
> is kind of a rip off when you can get individual boxes for under $10.
>
>
>
> Going to stop at the new Hobby Lobby store this Saturday and see if there
> are any better options then buying three to get one.
>
>
>
> My neighbor is a wood worker and could easily make better boxes out of Oak
> or other hard woods. Still, I'm going to get a pine version as an example
> for him. I would also add the brass corner bumpers that were common at the
> time.
>
>
>
>
>

27619. RE: [regenrx] Re: FW: [Milsurplus] Smart People: BC-9A Opinions Needed

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-24 00:54:56 UTC
From: dulmagedon@...
Topic: 27614 Message: 27619
Attachments: 1 described; binary payloads are missing from this source WARC

I have a Loop, in fact two of them as I did some loop experiments early last year. I used 3/8 copper tubing. And they are both tuned (variable cap) as well. I would probably use 01A tubes. They are underated and will run at voltages way above specs without a whimper. I use them in my Bruce Kelly AWA rigs.
Funny you mentioned 6AQ5 tubes triode connected . The last 4 in this rig which is a quad four of sorts (with a single tube osc) are so wired. They work well like that.
Dave's claim to fame here is his advice on the most practical way to build a ARC5 replacement AC PSU. In fact I built a similar one for my NO 19 WS and more recently My Collins TCS station as well. Good design easy to execute and works nicely.
donVe3LYX

27620. Re: FW: [Milsurplus] Smart People: BC-9A Opinions Needed

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-24 11:15:07 UTC
From: buzzgiles@...
Topic: 27614 Message: 27620

Thanks Dave and Ray for the BC-9A information.

73 de Gary, KF9CM

27621. 2.5mH Chokes

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-26 22:24:32 UTC
From: n0sa@...
Topic: 27621 Message: 27621

I just did something interesting (to me anyway). I just finished up building a two tube regen that runs on 12 volts DC. this is a design by Kees Talen K5BCQ . Link at bottom of page.
I had the final product finished except for 3- 2.5mH chokes that I have on backorder form Mouser. I had built a prototype using full size chokes but my final design was for a much smaller radio so I was waiting on the smaller chokes to finish the project. I designed this particular radio for just the 40 meter band so no wideband coverage.
I decided to try replacing the three 2.5mH chokes with three small chokes wound on FT37-43 toroids.
I put 12 turns on each toroid and they measure roughly 50uH in value. I installed them in the radio and it works wonderfully. I can sense no ill effect of using these smaller value toroid chokes. I have built quite a few solid state radios and they all used the same chokes to keep RF off power lines so I figured it might work okay.
At this point I plan to leave the radio as is, as it is working so well. I figure that 50uH is probably enough impedance at 7 Mhz to work just fine. If my design was for much lower frequencies, say the AM broadcast band I may have run into problems, I don't know for sure. Just thought I would throw this out there to see what others have to say about it.

I also used an iron T68 size toroid for the main coil and it works very well also, seems to be very stable and a small footprint.

Larry
n0sa

http://www.qsl.net/k5bcq/REGEN2/regen3.html

http://www.qsl.net/k5bcq/REGEN2/regen3.html http://www.qsl.net/k5bcq/REGEN2/regen3.html
Low Voltage (12VDC) Two Tube Regen Receiver Using "Space Charge" Technology

View on www.qsl.net http://www.qsl.net/k5bcq/REGEN2/regen3.html
Preview by Yahoo

27622. RE: [regenrx] 2.5mH Chokes

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-26 23:32:41 UTC
From: Hubert Miller
Topic: 27621 Message: 27622

Some of the projects used a standard Radio Shack 100 uH choke. Your torroid chokes might be an even better idea as their magnetic field is
confined, which possibly might avoid untoward feedback effects.
What were the tubes you used?
-Hue

27623. RE: [regenrx] 2.5mH Chokes

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-26 23:40:44 UTC
From: Hubert Miller
Topic: 27621 Message: 27623

Oh, okay, i saw the K5BCQ link.
He sure did a beautiful job of construction, and his writeup is great too.
A real inspiration.
-Hue

27625. RE: [regenrx] 2.5mH Chokes

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-27 01:30:09 UTC
From: Hubert Miller
Topic: 27621 Message: 27625

Same here. I suppose with a high impedance from grid to ground, there's capacitive conduction from input to plate.
That would seem to be an error in the original schematic.
-Hue

>I don't understand the point of the RF choke on the grid of the first triode. Is it a grounded grid amp, or isn't it?
Mike, W6MAB

27626. RE: [regenrx] 2.5mH Chokes

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-27 01:40:57 UTC
From: Hubert Miller
Topic: 27621 Message: 27626

Mike, K5BCQ's text comment on that point:
"I wanted the grid of the RF amp to have ONLY the bias level established by the 1K cathode resistor on it, not any potential RF from the ground to "control" the signal, so a RF choke was added. You can also tie it directly to ground or through a x00K resistor but I believe the RF choke is better."

With the grid directly grounded, the grid bias is already ONLY dictated by the 1K resistor anyway. I think with the choke in, leakage and stray capacitance (including the tube socket switch at RF) accounts for the RF getting to
the plate.
You are right. Good catch.
(Is this "nitpicking" ? I don't think so.)
-Hue

>I don't understand the point of the RF choke on the grid of the first triode. Is it a grounded grid amp, or isn't it?
Mike, W6MAB

27628. Re: [regenrx] 2.5mH Chokes

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-27 03:19:01 UTC
From: n0sa@...
Topic: 27621 Message: 27628

I will try removing the choke in the amp circuit to see if there is any difference. The radio works very well as far as I can tell as it is.
Larry
n0sa

27629. RE: [regenrx] 2.5mH Chokes

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-27 03:27:27 UTC
From: n0sa@...
Topic: 27621 Message: 27629

I put the link to the circuit I used in my original post Larry
n0sa

27630. Re: [regenrx] 2.5mH Chokes

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-27 04:01:06 UTC
From: n0sa@...
Topic: 27621 Message: 27630

I just tested the operation with and without the choke in the RF amp. The overall gain is about the same but there is more adjustment available with the RF gain pot. It is nicer without the added choke in my opinion. I don't know that much about this stuff so it is trial and error for me.
Maybe I will post a few pics of my radio, it really does a nice job on 40 meter CW as well as SSB.
Larry
n0sa

27631. Re: [regenrx] 2.5mH Chokes

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-27 04:53:03 UTC
From: Robert Nickels
Topic: 27621 Message: 27631

On 1/26/2017 4:24 PM, n0sa@... [regenrx] wrote:
> lt quite a few solid state radios and they all used the same chokes to
> keep RF of f power lines so I figured it might work okay.

The value of 2.5 mH seems to have taken on mythical powers I think, just because it was the "go to" RFC for so many projects, but the actual impedance value usually isn't critical. (Of course you don't want any self-resonances in the range of interest). I often use 1 or 1.5mH values with no problem.

In fact, it's easy to make an RF choke that's suitable for most homebrew tube projects. Start with a plastic sewing machine bobbin that are sold in a pack for a dollar or two in the sewing department. Mount it on a small bolt and chuck the bolt in an electric drill, then wrap it full of small gauge magnet wire, and add a wrap of tape or heatshrink. I think the wire I use is 30ga. but the size isn't critical, just use something similar to what's used on the old style RFCs. The Q will not be as high as the pretty pi-wound type, but impedance is impedance, and even 1 to 1.5 mH (which is what these typically come to) will put about 100K in series with the RF signal at 10 MHz, which is usually plenty to keep the RF where you want it.

73, Bob W9RAN

27632. Re: [regenrx] 2.5mH Chokes

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-27 05:10:44 UTC
From: Charles Moizeau
Topic: 27621 Message: 27632

Bob's observations are right on. The 2.5 mH choke with its four pi-wound, each with a universal winding of Litz wire, sections is an object of utilitarian beauty.

It can be quite satisfactorily replicated in more plebeian form, as he has helpfully explained.

Charles

From: regenrx@yahoogroups.com <regenrx@yahoogroups.com> on behalf of Robert Nickels w9ran@oneradio.net [regenrx] <regenrx@yahoogroups.com>
Sent: Thursday, January 26, 2017 11:53 PM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] 2.5mH Chokes

On 1/26/2017 4:24 PM, n0sa@... [regenrx] wrote:
> lt quite a few solid state radios and they all used the same chokes to
> keep RF of f power lines so I figured it might work okay.

The value of 2.5 mH seems to have taken on mythical powers I think, just because it was the "go to" RFC for so many projects, but the actual impedance value usually isn't critical. (Of course you don't want any self-resonances in the range of interest). I often use 1 or 1.5mH values with no problem.

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73, Bob W9RAN

27633. Re: [regenrx] 2.5mH Chokes 1.5mH sewing bobbin RF choke

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-27 06:59:02 UTC
From: Rob
Topic: 27621 Message: 27633

Thank you for the homebrew 1.5mH sewing bobbin RF choke instructions.

On 01/26/2017 11:53 PM, Robert Nickels w9ran@... [regenrx] wrote:
>
> On 1/26/2017 4:24 PM, n0sa@... [regenrx] wrote:
> > lt quite a few solid state radios and they all used the same chokes to
> > keep RF of f power lines so I figured it might work okay.
>
> The value of 2.5 mH seems to have taken on mythical powers I think, just
> because it was the "go to" RFC for so many projects, but the actual
> impedance value usually isn't critical. (Of course you don't want any
> self-resonances in the range of interest). I often use 1 or 1.5mH
> values with no problem.
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> In fact, it's easy to make an RF choke that's suitable for most homebrew
> tube projects. Start with a plastic sewing machine bobbin that are sold
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> small bolt and chuck the bolt in an electric drill, then wrap it full of
> small gauge magnet wire, and add a wrap of tape or heatshrink. I
> think the wire I use is 30ga. but the size isn't critical, just use
> something similar to what's used on the old style RFCs. The Q will not
> be as high as the pretty pi-wound type, but impedance is impedance, and
> even 1 to 1.5 mH (which is what these typically come to) will put about
> 100K in series with the RF signal at 10 MHz, which is usually plenty to
> keep the RF where you want it.
>
> 73, Bob W9RAN
>
>

27634. OT: OK, now that I have it, what do I do with it?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-29 23:57:53 UTC
From: Phil
Topic: 27634 Message: 27634

OK, sorry about the OT post, but there is a lot of knowledgeable people here. I don't really know where else to ask (maybe build a regen in the case ;-).

I was visiting my neighbor today and he was cleaning out his mobile home as he's getting married and moving out (the trailer is a total piece of junk and will probably be torn down). A good neighbor, I'll miss him, but not the trailer . . .

Anywhoo, he was piling up junk to go to the dump, mostly old 'puters, monitors etc, things I wouldn't bring home for fear of roaches. But I spotted a small electronic looking metal box, about 10x6x9 inches. Very rugged and heavy, I lifted up the lid. Lots of buttons, switches, a gazillion LEDs, two digital displays (one in the lid) and so forth. He didn't know what it is, or even where he got it from. Probably a yard sale or something.

Turns out it is a Phoenix Microsystems Model 5575 T1 MICRO BERT with the 5565 DSO Drop/Insert Lid option (and apparently the battery option due to it's weight). Some quick Google research shows that it is a TelCo T1 line tester. Even though the model number doesn't have the "B", it is apparently the "B" version as it looks like pictures of one (the "A" version is different).

Now the 64,000 Dollar question (remember that show?) is, WHAT USE IS IT TO A RADIO MAN who has a fairly well equipped (even if vintage) test bench??

In other words, can I use it for anything around the shack, other than parts?

--
73 de Phil, KO6BB.
Specializing in DXing NDBs (Longwave Beacons).

Location: "The Beaconeer's Lair".
Merced, Central California, 37,18,37N 120,30,6W CM97rh
http://www.qsl.net/ko6bb/

HF/LF RADIOS:
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
PORTABLES: Realistic DX380, Grundig G6 Aviator, Grundig S450DLX
Icom: IC-7200 Xceiver, DSP IF & filters (~2015).
Kenwood: TS-450SAT Xceiver, cascaded 250/125Hz Inrad filters.
SDR: Softrock Ensemble II LF (built from a kit 2015).

ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 4 Port Antenna Multicoupler, Feeds 4 RX's.

AF Filters: Timewave DSP-599zx & HOMEBREW 8 Hz Filter.

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.
Cushcraft AR-10 Ringo at 14 feet AGL for 10M beacon.

27635. RE: [regenrx] OT: OK, now that I have it, what do I do with it?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-30 00:18:27 UTC
From: Hubert Miller
Topic: 27634 Message: 27635

>Now the 64,000 Dollar question (remember that show?) is, WHAT USE IS IT
TO A RADIO MAN who has a fairly well equipped (even if vintage) test bench??

Answer: none

>In other words, can I use it for anything around the shack, other than
parts?
73 de Phil, KO6BB.

Answer: no. Even then, the parts count you can actually use is pretty low.
It might be some fun to take apart, but it's also tedious and a lot of work.
You might be able to use the power supply,
or parts of it. The power supply probably puts out voltages other than what
your other equipment wants. If you need hardware, i mean screws and nuts,
this will get you a good supply. Depending on how many holes in its carrying
case, the box might be useful for carrying tools or something.

DS1 and DS0 data rates (approx 1.5Mb and 64kB) are pretty near the end of their
history. There is NO market for such test set. If you give it to Goodwill, some
fool will buy it and try to flog it on Ebay, which is a futile effort.

This reminds me, i still have one or two such DS1 Bit Error Rate Tester in my own
storage that i need to compact. I have already taken apart 2 or 3 of them. One
of them had a separate dismountable 15 volt power supply, which i gave away
free at my hamfest table.

At a hamfest last year i sold two huge Sierra 128 Frequency Selective Voltmeters
both $15. After i tore another one apart here, i recovered two high-quality
tuning capacitors, of 400 pF and 75 pF. I wish now i'd kept the two others for
disassembly. This set, although it does work thru 15 MHz, is the size of an
Hammarlund SP-600 receiver, but without a real receiver's features.
The digital test equipment has much fewer usable parts; in fact, hardly any.
-Hue

27636. Re: Tater volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-31 03:17:18 UTC
From: dulmagedon@...
Topic: 27586 Message: 27636

And so as I was sitting eating supper tonight and I wondered out loud of my POW radio would run on potatoe batteries. I would need over 100 taters but It would be fun to try. Perhaps when the weather changes and I can do it outside. Meanwhile I may start collecting the required hardware. 105 large copper nails and 105 aluminum nails. Current draw is quite low for the plate etc but the filament may be a bit of a challenge. Still I am curious could it be done. On building it I used discarded batteries which always have some power and kept adding them till it started to squeal. However if it could be run on taters. It would give the project a whole new flavour;>)
donVe3LYX

27637. Re: [regenrx] Re: Tater volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-31 13:45:04 UTC
From: Brian Ford
Topic: 27586 Message: 27637

blockquote, div.yahoo_quoted { margin-left: 0 !important; border-left:1px #715FFA solid !important; padding-left:1ex !important; background-color:white !important; } Or, use the tree battery, find a nice large tree and all those nails tapped through the bark would give you a potential. And you could still have home fries.
Keith

Sent from Yahoo Mail for iPad

On Monday, January 30, 2017, 21:17, dulmagedon@... [regenrx] <regenrx@yahoogroups.com> wrote:

And so as I was sitting eating supper tonight and I wondered out loud of my POW radio would run on potatoe batteries. I would need over 100 taters but It would be fun to try. Perhaps when the weather changes and I can do it outside. Meanwhile I may start collecting the required hardware. 105 large copper nails and 105 aluminum nails. Current draw is quite low for the plate etc but the filament may be a bit of a challenge. Still I am curious could it be done. On building it I used discarded batteries which always have some power and kept adding them till it started to squeal. However if it could be run on taters. It would give the project a whole new flavour;>)
donVe3LYX
-- #ygrp-mkp {border:1px solid #d8d8d8;font-family:Arial;margin:10px 0;padding:0 10px;}#ygrp-mkp hr {border:1px solid #d8d8d8;}#ygrp-mkp #hd {color:#628c2a;font-size:85%;font-weight:700;line-height:122%;margin:10px 0;}#ygrp-mkp #ads {margin-bottom:10px;}#ygrp-mkp .ad {padding:0 0;}#ygrp-mkp .ad p {margin:0;}#ygrp-mkp .ad a {color:#0000ff;text-decoration:none;}#ygrp-sponsor #ygrp-lc {font-family:Arial;}#ygrp-sponsor #ygrp-lc #hd {margin:10px 0px;font-weight:700;font-size:78%;line-height:122%;}#ygrp-sponsor #ygrp-lc .ad {margin-bottom:10px;padding:0 0;}#actions {font-family:Verdana;font-size:11px;padding:10px 0;}#activity {background-color:#e0ecee;float:left;font-family:Verdana;font-size:10px;padding:10px;}#activity span {font-weight:700;}#activity span:first-child {text-transform:uppercase;}#activity span a {color:#5085b6;text-decoration:none;}#activity span span {color:#ff7900;}#activity span .underline {text-decoration:underline;}.attach {clear:both;display:table;font-family:Arial;font-size:12px;padding:10px 0;width:400px;}.attach div a {text-decoration:none;}.attach img {border:none;padding-right:5px;}.attach label {display:block;margin-bottom:5px;}.attach label a {text-decoration:none;}blockquote {margin:0 0 0 4px;}.bold {font-family:Arial;font-size:13px;font-weight:700;}.bold a {text-decoration:none;}dd.last p a {font-family:Verdana;font-weight:700;}dd.last p span {margin-right:10px;font-family:Verdana;font-weight:700;}dd.last p span.yshortcuts {margin-right:0;}div.attach-table div div a {text-decoration:none;}div.attach-table {width:400px;}div.file-title a, div.file-title a:active, div.file-title a:hover, div.file-title a:visited {text-decoration:none;}div.photo-title a, div.photo-title a:active, div.photo-title a:hover, div.photo-title a:visited {text-decoration:none;}div#ygrp-mlmsg #ygrp-msg p a span.yshortcuts {font-family:Verdana;font-size:10px;font-weight:normal;}.green {color:#628c2a;}.MsoNormal {margin:0 0 0 0;}o {font-size:0;}#photos div {float:left;width:72px;}#photos div div

{border:1px solid #666666;height:62px;overflow:hidden;width:62px;}#photos div label {color
:#666666;font-size:10px;overflow:hidden;text-align:center;white-space:nowrap;width:64px;}#
reco-category {font-size:77%;}#reco-desc {font-size:77%;}.replbq {margin:4px;}#ygrp-actbar
div a:first-child {margin-right:2px;padding-right:5px;}#ygrp-mlmsg
{font-size:13px;font-family:Arial, helvetica, clean, sans-serif;}#ygrp-mlmsg table
{font-size:inherit;font:100%;}#ygrp-mlmsg select, input, textarea {font:99% Arial,
Helvetica, clean, sans-serif;}#ygrp-mlmsg pre, code {font:115% monospace;}#ygrp-mlmsg *
{line-height:1.22em;}#ygrp-mlmsg #logo {padding-bottom:10px;}#ygrp-msg p a
{font-family:Verdana;}#ygrp-msg p#attach-count span
{color:#1E66AE;font-weight:700;}#ygrp-reco #reco-head
{color:#ff7900;font-weight:700;}#ygrp-reco {margin-bottom:20px;padding:0px;}#ygrp-sponsor
#ov li a {font-size:130%;text-decoration:none;}#ygrp-sponsor #ov li
{font-size:77%;list-style-type:square;padding:6px 0;}#ygrp-sponsor #ov ul
{margin:0;padding:0 0 0 8px;}#ygrp-text {font-family:Georgia;}#ygrp-text p {margin:0 0 1em
0;}#ygrp-text tt {font-size:120%;}#ygrp-vital ul li:last-child {border-right:none
!important;}

27638. Re: [regenrx] Re: Tater volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-31 14:19:56 UTC
From: dulmagedon@...
Topic: 27586 Message: 27638

But I suspect you only get one battery cell from a tree, right? Anyway I am not allowed fries anymore or taters.
i would have to do it on the sneak though as I hate explaining.
Anyway I may give it a shot. and buy a bag this spring.
donVe3LYX

27639. Re: [regenrx] Re: Tater volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-31 20:46:03 UTC
From: Brian Ford
Topic: 27586 Message: 27639

blockquote, div.yahoo_quoted { margin-left: 0 !important; border-left:1px #715FFA solid !important; padding-left:1ex !important; background-color:white !important; } It strikes me, possibly incorrectly that each pair of copper/zinc electrodes would be a cell. Sort of like a battery having cells. But I am probably incorrect.
I have had to drop potatoes from my diet, I have replaced them with sweet potatoes (yams) and Jerusalem artichokes.
Keith Kf4tap

Sent from Yahoo Mail for iPad

On Tuesday, January 31, 2017, 08:19, dulmagedon@... [regenrx] <regenrx@yahoogroups.com> wrote:

But I suspect you only get one battery cell from a tree, right? Anyway I am not allowed fries anymore or taters.
i would have to do it on the sneak though as I hate explaining.
Anyway I may give it a shot. and buy a bag this spring.
donVe3LYX
-- #ygrp-mkp {border:1px solid #d8d8d8;font-family:Arial;margin:10px 0;padding:0 10px;}#ygrp-mkp hr {border:1px solid #d8d8d8;}#ygrp-mkp #hd {color:#628c2a;font-size:85%;font-weight:700;line-height:122%;margin:10px 0;}#ygrp-mkp #ads {margin-bottom:10px;}#ygrp-mkp .ad {padding:0 0;}#ygrp-mkp .ad p {margin:0;}#ygrp-mkp .ad a {color:#0000ff;text-decoration:none;}#ygrp-sponsor #ygrp-lc {font-family:Arial;}#ygrp-sponsor #ygrp-lc #hd {margin:10px 0px;font-weight:700;font-size:78%;line-height:122%;}#ygrp-sponsor #ygrp-lc .ad {margin-bottom:10px;padding:0 0;}#actions {font-family:Verdana;font-size:11px;padding:10px 0;}#activity {background-color:#e0ecee;float:left;font-family:Verdana;font-size:10px;padding:10px;}#activity span {font-weight:700;}#activity span:first-child {text-transform:uppercase;}#activity span a {color:#5085b6;text-decoration:none;}#activity span span {color:#ff7900;}#activity span .underline {text-decoration:underline;}.attach {clear:both;display:table;font-family:Arial;font-size:12px;padding:10px 0;width:400px;}.attach div a {text-decoration:none;}.attach img {border:none;padding-right:5px;}.attach label {display:block;margin-bottom:5px;}.attach label a {text-decoration:none;}blockquote {margin:0 0 0 4px;}.bold {font-family:Arial;font-size:13px;font-weight:700;}.bold a {text-decoration:none;}dd.last p a {font-family:Verdana;font-weight:700;}dd.last p span {margin-right:10px;font-family:Verdana;font-weight:700;}dd.last p span.yshortcuts {margin-right:0;}div.attach-table div div a {text-decoration:none;}div.attach-table {width:400px;}div.file-title a, div.file-title a:active, div.file-title a:hover, div.file-title a:visited {text-decoration:none;}div.photo-title a, div.photo-title a:active, div.photo-title a:hover, div.photo-title a:visited {text-decoration:none;}div#ygrp-mlmsg #ygrp-msg p a span.yshortcuts {font-family:Verdana;font-size:10px;font-weight:normal;}.green {color:#628c2a;}.MsoNormal {margin:0 0 0 0;}o {font-size:0;}#photos div {float:left;width:72px;}#photos div div {border:1px solid #666666;height:62px;overflow:hidden;width:62px;}#photos div label {color:#666666;font-size:10px;overflow:hidden;text-align:center;white-space:nowrap;width:64px;}#

reco-category {font-size:77%;}#reco-desc {font-size:77%;}.replbq {margin:4px;}#ygrp-actbar div a:first-child {margin-right:2px;padding-right:5px;}#ygrp-mlmsg {font-size:13px;font-family:Arial, helvetica, clean, sans-serif;}#ygrp-mlmsg table {font-size:inherit;font:100%;}#ygrp-mlmsg select, input, textarea {font:99% Arial, Helvetica, clean, sans-serif;}#ygrp-mlmsg pre, code {font:115% monospace;}#ygrp-mlmsg * {line-height:1.22em;}#ygrp-mlmsg #logo {padding-bottom:10px;}#ygrp-msg p a {font-family:Verdana;}#ygrp-msg p#attach-count span {color:#1E66AE;font-weight:700;}#ygrp-reco #reco-head {color:#ff7900;font-weight:700;}#ygrp-reco {margin-bottom:20px;padding:0px;}#ygrp-sponsor #ov li a {font-size:130%;text-decoration:none;}#ygrp-sponsor #ov li {font-size:77%;list-style-type:square;padding:6px 0;}#ygrp-sponsor #ov ul {margin:0;padding:0 0 0 8px;}#ygrp-text {font-family:Georgia;}#ygrp-text p {margin:0 0 1em 0;}#ygrp-text tt {font-size:120%;}#ygrp-vital ul li:last-child {border-right:none !important;}

27640. Re: [regenrx] Re: Tater volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-31 20:55:33 UTC
From: dulmagedon@...
Topic: 27586 Message: 27640

No taters I could live with but when the doc said "You have eaten your last donut" I thought he went too far. I get hungry now just looking at a toroid!
donVe3LYX

27641. Re: [regenrx] Re: Tater volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-01-31 20:51:01 UTC
From: Tom Lee
Topic: 27586 Message: 27641

You are right in the sense that each pair would indeed generate power. However, without insulating each cell from the others, there's a sneak path through the conductive electrolyte that shorts things out. That's why, for example, your car battery has individual compartments for the cells.

So, slice up that potato or tree into sections and you're good to go.

--Cheers,
Tom

--
Prof. Thomas H. Lee
Allen Bldg., CIS-205
420 Via Palou Mall
Stanford University
Stanford, CA 94305-4070
http://www-smirc.stanford.edu
650-725-3383 (public fax; no confidential information, please)

On 1/31/2017 12:46 PM, Brian Ford kf4tap@... [regenrx] wrote:
>
> It strikes me, possibly incorrectly that each pair of copper/zinc
> electrodes would be a cell. Sort of like a battery having cells. But I
> am probably incorrect.
>
>
> I have had to drop potatoes from my diet, I have replaced them with
> sweet potatoes (yams) and Jerusalem artichokes.
>
> Keith
> Kf4tap
>
>
> Sent from Yahoo Mail for iPad <https://yho.com/footer0>
>
> On Tuesday, January 31, 2017, 08:19, dulmagedon@... [regenrx]
> <regenrx@yahoogroups.com> wrote:
>
> But I suspect you only get one battery cell from a tree, right?
> Anyway I am not allowed fries anymore or taters.
> i would have to do it on the sneak though as I hate explaining.
> Anyway I may give it a shot. and buy a bag this spring.
> donVe3LYX
>
>

27650. Re: [regenrx] Re: Tater volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-01 13:26:52 UTC
From: dulmagedon@...
Topic: 27586 Message: 27650

We have here devices called Eco fans that sit on top of a wood stove and run when the stove is hot using the differential in heat to power them. I suspect they are peltier devices or something along that line. Never thought of it before but if they will run a fan they will run a radio. only previous interest I had in them was using a bunch of peltier devices for a sold state air conditioner. Very interesting , alternative energy sources. I heat my home with a passive solar heater on sunny days. It works perfectly . I have a small solar panel keeping my 12sl7 regen heater battery charged. I have tried a jar of vinigar and aluminum and copper electrodes for a battery and it worked fine. So tater power is also of great interest. Always wanted to build a wind powered Air compressor for my shop which immediatley leads to a wind powered AC/or heat pump concept. A multi cell compostor would probably be a decent light use power source. Why didnt I think of this stuff when I was younger and had some zip.
donVe3LYX

27652. Radio Australia shortwave ended Jan. 31 2017

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-01 19:54:15 UTC
From: Hubert Miller
Topic: 27652 Message: 27652

"ABC Exits Shortwave Radio Transmission. The ABC will end its shortwave transmission service in the Northern Territory and to international audiences from 31 January 2017."

Maybe this has already been posted here. If so, i missed it.
This is sad news for me. I have not fired up any shortwave receiver for a while - the only receiver i have on hand, not put away in storage to prepare for a move,
is an Icom handheld IC-R20, and it's a poor substitute for a real shortwave radio. But i had looked forward to hearing Radio Australia again. In the past, going
back to the 1970s, i enjoyed R.A.'s afternoon and late night broadcasts to here on the Left Coast, and using a great variety of receivers, from the 3-tube
Knight "Space Spanner" to ex-military receivers to commercial products both good and mediocre. I will warmly remember the great programming and the music
RA introduced me to.
Yes, i can if i want, listen online now. But a little bit of the magic is gone, now that the program can no longer arrive at my own obsolete, home-built, or classic
veteran equipment by simply bouncing its way across the Pacific.
-Hue

27653. Re: [regenrx] Radio Australia shortwave ended Jan. 31 2017

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-02 00:27:17 UTC
From: Michael
Topic: 27652 Message: 27653

On 01.02.17 19:54, Hubert Miller kargo_cult@... [regenrx] wrote:
>
>
> ?ABC Exits *Shortwave Radio* Transmission. The ABC will *end* its
> *shortwave* transmission service in the Northern Territory and to
> international audiences from 31 January 2017.?
...
> This is sad news for me. I have not fired up any shortwave receiver for
> a while ? the only receiver i have on hand, not put away in storage to
> prepare for a move,...

....

The withering of AM broadcasting is sad indeed. The dismantlement of transmitters and antenna arrays gives rise to concern. Should, one day, the sun or bad boys cause digital networks to fail, what then?

MichaelUK

27655. Re: [regenrx] Radio Australia shortwave ended Jan. 31 2017

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-02 00:56:26 UTC
From: Paul Martin
Topic: 27652 Message: 27655

Paul

> On Feb 1, 2017, at 2:54 PM, Hubert Miller kargo_cult@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
> “ABC Exits Shortwave Radio Transmission. The ABC will end its shortwave transmission service in the Northern Territory and to international audiences from 31 January 2017.”
>
>
>
> Maybe this has already been posted here. If so, i missed it.
>
> This is sad news for me. I have not fired up any shortwave receiver for a while – the only receiver i have on hand, not put away in storage to prepare for a move,
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> is an Icom handheld IC-R20, and it’s a poor substitute for a real shortwave radio. But i had looked forward to hearing Radio Australia again. In the past, going
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> back to the 1970s, i enjoyed R.A.’s afternoon and late night broadcasts to here on the Left Coast, and using a great variety of receivers, from the 3-tube
>
> Knight “Space Spanner” to ex-military receivers to commercial products both good and mediocre. I will warmly remember the great programming and the music
>
> RA introduced me to.
>
> Yes, i can if i want, listen online now. But a little bit of the magic is gone, now that the program can no longer arrive at my own obsolete, home-built, or classic
>
> veteran equipment by simply bouncing its way across the Pacific.
>
> -Hue
>
>

27656. OT: make your own battery

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-02 12:47:36 UTC
From: wb9kzy@...
Topic: 27656 Message: 27656

NOVA had David Pogue present a show last night about batteries:

Watch Full Episodes Online of NOVA on PBS | Search for the Super Battery
http://www.pbs.org/video/2365946487/

http://www.pbs.org/video/2365946487/

Watch Full Episodes Online of NOVA on PBS | Search for t...
http://www.pbs.org/video/2365946487/ Explore the hidden world of energy storage and how it holds the keys to a greener future.

View on www.pbs.org http://www.pbs.org/video/2365946487/
Preview by Yahoo

at about 5:30 he makes an aluminum-air battery (50 cells) out of aluminum cans, charcoal, seawater, cloth and a little wire. The voltmeter shows roughly 1 volt from a single cell.

Might be useful for powering a solid state regen ?

73,

Chuck, WB9KZY

27657. Re: OT: make your own battery

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-02 23:31:45 UTC
From: dulmagedon@...
Topic: 27656 Message: 27657

It was a good show. I happened to see it too. 50 volts would do a tube regen too. They start to work on simple triodes around 38 volts and will stay out of osc mode till sometimes as high as 68 volts. By doing it that way you can make an operational regen without a regen control. Above that you need a pot or regen throttle cap.
donVe3LYX

27658. Re: [regenrx] what is sulfate of zinc ..... is it the same as zinc sulphate

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-03 07:51:13 UTC
From: Rob
Topic: 27572 Message: 27658

well heres a twist......
Zinc sulfate from Greenway Biotech Contains 35.5% zinc and 16.5% sulfur

3 pounds on EBAY costs $13
http://www.ebay.com/itm/192046636849

So then I have to ask if ALL the zinc sulfate sold in garden centers and
hardware stores
contains SULFUR.
Considering the name is zinc SULFATE.

and is it the right zinc sulfate to build this battery:

http://www.learnmorsecode.com/regen2/battery02.jpg

or will the 16% sulfur ruin the intended chemistry of the battery?

27659. Re: [regenrx] what is sulfate of zinc ..... is it the same as zinc sulphate

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-03 15:00:42 UTC
From: Tim Hills
Topic: 27572 Message: 27659

Rob,

Zinc Sulfate contains Sulfur, it's a salt of Zinc and Sulfuric Acid.

The percentages of Elements in fertilizers are rated by the weight of
the Element/total weight of the product.
Zinc Sulfate Monohydrate (ZnSO4+H2O) is a compound containing Zinc,
Sulfur and Oxygen Atoms. A Zinc atom is heavier than a Sulfur or Oxygen
atom. I haven't looked up the atomic masses but by the SWAG method the
ratios look about right for relatively pure ZnSO4-H2O.

Guess the time and money I spent on College Chemistry wasn't all wasted ;)

HTH
Tim Hills
Sioux Falls, SD

On 2/3/2017 1:51 AM, Rob roomberg@... [regenrx] wrote:
>
> well heres a twist......
> Zinc sulfate from Greenway Biotech Contains 35.5% zinc and 16.5% sulfur
>
> 3 pounds on EBAY costs $13
> http://www.ebay.com/itm/192046636849
>
> So then I have to ask if ALL the zinc sulfate sold in garden centers and
> hardware stores
> contains SULFUR.
> Considering the name is zinc SULFATE.
>
> and is it the right zinc sulfate to build this battery:
>
> http://www.learnmorsecode.com/regen2/battery02.jpg
>
> or will the 16% sulfur ruin the intended chemistry of the battery?
>
>

27660. Re: [regenrx] what is sulfate of zinc ..... is it the same as zinc sulphate

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-03 18:05:07 UTC
From: Daniel Donnelly
Topic: 27572 Message: 27660

Good morning to the group. Well at least someplace on the web its morning,
According to my much abused copy of Henley's formulas for home and
workshop, 1908 edition, sulfate of zinc is a poisonous white powder, is
used in agriculture, batteries and rat poisons. it is made by reacting
either scrap or powered zinc with dilute sulfuric acid.
I don't know about its use in batteries but.when I was in Mexico we used it
to keep rats under control at our plant. it was quite effective.

Zinc sulfate should be the same thing

That my .2 cents worth, hope it helps.
Dan KC7VDA

On Fri, Feb 3, 2017 at 8:00 AM, Tim Hills thills@... [regenrx] <
regenrx@yahoogroups.com> wrote:

>
>
> Rob,
>
> Zinc Sulfate contains Sulfur, it's a salt of Zinc and Sulfuric Acid.
> The percentages of Elements in fertilizers are rated by the weight of the
> Element/total weight of the product.
> Zinc Sulfate Monohydrate (ZnSO4+H2O) is a compound containing Zinc, Sulfur
> and Oxygen Atoms. A Zinc atom is heavier than a Sulfur or Oxygen atom. I
> haven't looked up the atomic masses but by the SWAG method the ratios look
> about right for relatively pure ZnSO4-H2O.
>
> Guess the time and money I spent on College Chemistry wasn't all wasted ;)
>
> HTH
> Tim Hills
> Sioux Falls, SD
>
> On 2/3/2017 1:51 AM, Rob roomberg@... [regenrx] wrote:
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>
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>
> well heres a twist......
> Zinc sulfate from Greenway Biotech Contains 35.5% zinc and 16.5% sulfur
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> 3 pounds on EBAY costs $13
> http://www.ebay.com/itm/192046636849
>
> So then I have to ask if ALL the zinc sulfate sold in garden centers and
> hardware stores

> contains SULFUR.
> Considering the name is zinc SULFATE.
>
> and is it the right zinc sulfate to build this battery:
>
> http://www.learnmorsecode.com/regen2/battery02.jpg
>
> or will the 16% sulfur ruin the intended chemistry of the battery?
>
>
>
>

27661. Re: [regenrx] Re: Tater volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-04 03:04:07 UTC
From: Brian Ford
Topic: 27586 Message: 27661

blockquote, div.yahoo_quoted { margin-left: 0 !important; border-left:1px #715FFA solid !important; padding-left:1ex !important; background-color:white !important; } I tried the homemade battery, not only did I get some power I also elctroplated the Al.
Keith

Sent from Yahoo Mail for iPad

On Wednesday, February 1, 2017, 07:26, dulmagedon@... [regenrx] <regenrx@yahoogroups.com> wrote:

We have here devices called Eco fans that sit on top of a wood stove and run when the stove is hot using the differential in heat to power them. I suspect they are peltier devices or something along that line. Never thought of it before but if they will run a fan they will run a radio. only previous interest I had in them was using a bunch of peltier devices for a sold state air conditioner. Very interesting , alternative energy sources. I heat my home with a passive solar heater on sunny days. It works perfectly . I have a small solar panel keeping my 12sl7 regen heater battery charged. I have tried a jar of vinigar and aluminum and copper electrodes for a battery and it worked fine. So tater power is also of great interest. Always wanted to build a wind powered Air compressor for my shop which immediatley leads to a wind powered AC/or heat pump concept. A multi cell compostor would probably be a decent light use power source. Why didnt I think of this stuff when I was younger and had some zip.
donVe3LYX
-- #ygrp-mkp {border:1px solid #d8d8d8;font-family:Arial;margin:10px 0;padding:0 10px;}#ygrp-mkp hr {border:1px solid #d8d8d8;}#ygrp-mkp #hd {color:#628c2a;font-size:85%;font-weight:700;line-height:122%;margin:10px 0;}#ygrp-mkp #ads {margin-bottom:10px;}#ygrp-mkp .ad {padding:0 0;}#ygrp-mkp .ad p {margin:0;}#ygrp-mkp .ad a {color:#0000ff;text-decoration:none;}#ygrp-sponsor #ygrp-lc {font-family:Arial;}#ygrp-sponsor #ygrp-lc #hd {margin:10px 0px;font-weight:700;font-size:78%;line-height:122%;}#ygrp-sponsor #ygrp-lc .ad {margin-bottom:10px;padding:0 0;}#actions {font-family:Verdana;font-size:11px;padding:10px 0;}#activity {background-color:#e0ecee;float:left;font-family:Verdana;font-size:10px;padding:10px;}#activity span {font-weight:700;}#activity span:first-child {text-transform:uppercase;}#activity span a {color:#5085b6;text-decoration:none;}#activity span span {color:#ff7900;}#activity span .underline {text-decoration:underline;}.attach {clear:both;display:table;font-family:Arial;font-size:12px;padding:10px 0;width:400px;}.attach div a {text-decoration:none;}.attach img {border:none;padding-right:5px;}.attach label {display:block;margin-bottom:5px;}.attach label a {text-decoration:none;}blockquote {margin:0 0 0 4px;}.bold {font-family:Arial;font-size:13px;font-weight:700;}.bold a {text-decoration:none;}dd.last p a {font-family:Verdana;font-weight:700;}dd.last p span {margin-right:10px;font-family:Verdana;font-weight:700;}dd.last p span.yshortcuts {margin-right:0;}div.attach-table div div a {text-decoration:none;}div.attach-table {width:400px;}div.file-title a, div.file-title a:active, div.file-title a:hover, div.file-title a:visited {text-decoration:none;}div.photo-title a, div.photo-title a:active, div.photo-title a:hover, div.photo-title a:visited

{text-decoration:none;}div#ygrp-mlmsg #ygrp-msg p a span.yshortcuts
{font-family:Verdana;font-size:10px;font-weight:normal;}.green {color:#628c2a;}.MsoNormal
{margin:0 0 0 0;}o {font-size:0;}#photos div {float:left;width:72px;}#photos div div
{border:1px solid #666666;height:62px;overflow:hidden;width:62px;}#photos div label {color
:#666666;font-size:10px;overflow:hidden;text-align:center;white-space:nowrap;width:64px;}#
reco-category {font-size:77%;}#reco-desc {font-size:77%;}.replbq {margin:4px;}#ygrp-actbar
div a:first-child {margin-right:2px;padding-right:5px;}#ygrp-mlmsg
{font-size:13px;font-family:Arial, helvetica, clean, sans-serif;}#ygrp-mlmsg table
{font-size:inherit;font:100%;}#ygrp-mlmsg select, input, textarea {font:99% Arial,
Helvetica, clean, sans-serif;}#ygrp-mlmsg pre, code {font:115% monospace;}#ygrp-mlmsg *
{line-height:1.22em;}#ygrp-mlmsg #logo {padding-bottom:10px;}#ygrp-msg p a
{font-family:Verdana;}#ygrp-msg p#attach-count span
{color:#1E66AE;font-weight:700;}#ygrp-reco #reco-head
{color:#ff7900;font-weight:700;}#ygrp-reco {margin-bottom:20px;padding:0px;}#ygrp-sponsor
#ov li a {font-size:130%;text-decoration:none;}#ygrp-sponsor #ov li
{font-size:77%;list-style-type:square;padding:6px 0;}#ygrp-sponsor #ov ul
{margin:0;padding:0 0 0 8px;}#ygrp-text {font-family:Georgia;}#ygrp-text p {margin:0 0 1em
0;}#ygrp-text tt {font-size:120%;}#ygrp-vital ul li:last-child {border-right:none
!important;}

27662. Re: [regenrx] Re: Tater volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-04 03:29:16 UTC
From: Tom Lee
Topic: 27586 Message: 27662

Which version? The potato, boiled or unboiled, or the more traditional
formula?

--
Prof. Thomas H. Lee
Allen Bldg., CIS-205
420 Via Palou Mall
Stanford University
Stanford, CA 94305-4070
http://www-smirc.stanford.edu
650-725-3383 (public fax; no confidential information, please)

On 2/3/2017 7:04 PM, Brian Ford kf4tap@... [regenrx] wrote:
>
> I tried the homemade battery, not only did I get some power I also
> elctroplated the Al.
>
>
> Keith
>
>
> Sent from Yahoo Mail for iPad <https://yho.com/footer0>
>
> On Wednesday, February 1, 2017, 07:26, dulmagedon@... [regenrx]
> <regenrx@yahoogroups.com> wrote:
>
> We have here devices called Eco fans that sit on top of a wood
> stove and run when the stove is hot using the differential in heat
> to power them. I suspect they are peltier devices or something
> along that line. Never thought of it before but if they will run a
> fan they will run a radio. only previous interest I had in them
> was using a bunch of peltier devices for a sold state air
> conditioner. Very interesting , alternative energy sources. I heat
> my home with a passive solar heater on sunny days. It works
> perfectly . I have a small solar panel keeping my 12sl7 regen
> heater battery charged. I have tried a jar of vinigar and
> aluminum and copper electrodes for a battery and it worked fine.
> So tater power is also of great interest. Always wanted to build a
> wind powered Air compressor for my shop which immediatley leads to
> a wind powered AC/or heat pump concept. A multi cell compostor
> would probably be a decent light use power source. Why didnt I
> think of this stuff whe n I was younger and had some zip.
> donVe3LYX
>
>

27663. Re: The GlobeSpan World Band Receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-04 14:40:14 UTC
From: dawmast@...
Topic: 27434 Message: 27663

At https://www.flickr.com/photos/79580324@N04/sets/72157633952850787 https://www.flickr.com/photos/79580324@N04/sets/72157633952850787 there is a similar kind of a regenerative receiver with a Colpitts-type regenerative stage which is followed by an RF interim amp and a diode detector.

27664. Re: [regenrx] Tater volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-04 17:52:18 UTC
From: Rajaram Bhat
Topic: 27586 Message: 27664
Attachments: 4 described; binary payloads are missing from this source WARC

Those interested in home made batteries may be interested in the attached articles.

Raj

> On Feb 3, 2017, at 10:29 PM, Tom Lee tomlee@...ford.edu [regenrx]
<regenrx@yahoogroups.com> wrote:
>
> Which version? The potato, boiled or unboiled, or the more traditional formula?
>
> --
> Prof. Thomas H. Lee
> Allen Bldg., CIS-205
> 420 Via Palou Mall
> Stanford University
> Stanford, CA 94305-4070
> http://www-smirc.stanford.edu <http://www-smirc.stanford.edu/>
> 650-725-3383 (public fax; no confidential information, please)
> On 2/3/2017 7:04 PM, Brian Ford kf4tap@... <mailto:kf4tap@...> [regenrx] wrote:
>>
>> I tried the homemade battery, not only did I get some power I also elctroplated the Al.
>>
>>
>> Keith
>>
>>
>> Sent from Yahoo Mail for iPad <https://yho.com/footer0>
>>
>> On Wednesday, February 1, 2017, 07:26, dulmagedon@... <mailto:dulmagedon@...>
[regenrx]<regenrx@yahoogroups.com> <mailto:regenrx@yahoogroups.com> wrote:
>>
>>
>> We have here devices called Eco fans that sit on top of a wood stove and run when the stove is hot using the differential in heat to power them. I suspect they are peltier devices or something along that line. Never thought of it before but if they will run a fan they will run a radio. only previous interest I had in them was using a bunch of peltier devices for a sold state air conditioner. Very interesting , alternative energy sources. I heat my home with a passive solar heater on sunny days. It works perfectly . I have a small solar panel keeping my 12sl7 regen heater battery charged. I have tried a jar of vinigar and aluminum and copper electrodes for a battery and it worked fine. So tater power is also of great interest. Always wanted to build a wind powered Air compressor for my shop which immediatley leads to a wind powered AC/or heat pump concept. A multi cell compostor would probably be a decent light use power source. Why didnt I think of this stuff whe n I was younger and had some zip.
>> donVe3LYX

>>
>

27665. Re: [regenrx] Re: Tater volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-05 14:04:53 UTC
From: brad@...
Topic: 27586 Message: 27665

I have something called a Lufo lamp. You can google it it. It is an oil lamp with a peltie-based generator on the top heated by the flame and a radio in the base. I added a power outlet so it could power other low power devices like my Baygen Freeplay. It works well and is good for emergencies. Too bad they never made made many of them.

27666. Carbon Composition Resistors

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-07 20:57:26 UTC
From: Charles Moizeau
Topic: 27666 Message: 27666

A large quantity (1,300) of these selling for 10 bucks.

www.goldmine-elec-products.com<http://www.goldmine-elec-products.com>.

Item # G21712.

Reported as selling out quickly.

Charles

27667. Re: [regenrx] $10 Carbon Composition Resistors cost $27.97

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-08 00:03:58 UTC
From: Rob
Topic: 27666 Message: 27667

They charged me $17.97 for shipping so the total order came to $27.97

but hey its my birthday and my mother-in-law just sent me a $50 check so
what else should I spend found money on?

On 02/07/2017 03:57 PM, Charles Moizeau w2sh@... [regenrx] wrote:
>
> A large quantity (1,300) of these selling for 10 bucks.
>
>
> www.goldmine-elec-products.com <http://www.goldmine-elec-products.com>.
>
>
> Item # G21712.
>
>
> Reported as selling out quickly.
>
>
> Charles
>
>

27668. Re: [regenrx] $10 Carbon Composition Resistors cost $27.97

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-08 12:15:52 UTC
From: Alan Fryer
Topic: 27666 Message: 27668

I was ordering 2 lots and they wanted to charge me $28 shipping, so I backed off...

Alan, N3BJ

On Tue, Feb 7, 2017 at 7:03 PM, Rob roomberg@... [regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> They charged me $17.97 for shipping so the total order came to $27.97
>
> but hey its my birthday and my mother-in-law just sent me a $50 check so
> what else should I spend found money on?
>
>
> On 02/07/2017 03:57 PM, Charles Moizeau w2sh@... [regenrx] wrote:
>
>
>
> A large quantity (1,300) of these selling for 10 bucks.
>
>
> www.goldmine-elec-products.com.
>
>
> Item # G21712.
>
>
> Reported as selling out quickly.
>
>
> Charles
>
>
>
>

27669. Re: [regenrx] $10 Carbon Composition Resistors cost $27.97

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-08 14:57:32 UTC
From: msalbert@...
Topic: 27666 Message: 27669

Once in a while electronic Goldmine has a "shipping sale" where they offer USPS flat rate shipping. Unfortunately they may not offer that and the item you want at the same time :-) Regards, Mark KB9VKE -----Original Message----- From: Alan Fryer n3bjdx@... [regenrx] To: regenrx Sent: Wed, Feb 8, 2017 06:15 AM Subject: Re: [regenrx] $10 Carbon Composition Resistors cost $27.97

I was ordering 2 lots and they wanted to charge me $28 shipping, so I backed off... Alan, N3BJ

On Tue, Feb 7, 2017 at 7:03 PM, Rob roomberg@... [regenrx] <regenrx@yahoogroups.com> wrote:

They charged me $17.97 for shipping so the total order came to $27.97 but hey its my birthday and my mother-in-law just sent me a $50 check so what else should I spend found money on?
On 02/07/2017 03:57 PM, Charles Moizeau w2sh@... [regenrx] wrote:

A large quantity (1,300) of these selling for 10 bucks.

www.goldmine-elec-products.com (http://www.goldmine-elec-products.com).

Item # G21712.

Reported as selling out quickly.

Charles

27670. Re: [regenrx] $10 Carbon Composition Resistors cost $27.97... 2 cents each aint so bad

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-08 16:04:45 UTC
From: Rob
Topic: 27666 Message: 27670

I've been buying the modern 1/2 watt carbon resistors from
BANGGOOD.com... 1,000 resistors for $10
at a penny each..... free shipping.

this goldmine sells 1,300 for $28 .. .. which is really means about 2
cents each.

I can live with that price.
I can build a radio with 20 resistors and not blink at the cost being 40
cents worth of resistors.

Live gone are the days of Radio Shack mugging me for a pack of 5 resistors.

WHAT I REALLY WANT tO KNOW IS IF THERE IS ANY REASON TO NOT USE THESE
CARBON COMPOSITION RESISTORS
IN RADIO CIRCUITS?

compared to using the modern TAN carbon resistors
or using the modern BLUE metal film resistors.

considering I NEVER buy any 1/4 or 1/8th watt resistors.
I stick to using large body ...large wire... 1/2 watt carbon resistors....
because the colors don't get lost in the tiny size and I can find them
when I drop them.

On 02/08/2017 09:57 AM, msalbert@... [regenrx] wrote:
>
> Once in a while electronic Goldmine has a "shipping sale" where they
> offer USPS flat rate shipping. Unfortunately they may not offer that
> and the item you want at the same time :-)
> Regards, Mark KB9VKE
>
> -----Original Message-----
> From: Alan Fryer n3bjdx@... [regenrx] <regenrx@yahoogroups.com>
> To: regenrx <regenrx@yahoogroups.com>
> Sent: Wed, Feb 8, 2017 06:15 AM
> Subject: Re: [regenrx] $10 Carbon Composition Resistors cost $27.97
>
>
>
>
> I was ordering 2 lots and they wanted to charge me $28 shipping, so I
> backed off...
>
> Alan, N3BJ

>
> On Tue, Feb 7, 2017 at 7:03 PM, Rob roomberg@...
> <mailto:roomberg@...> [regenrx] <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>> wrote:
>
> They charged me $17.97 for shipping so the total order came to $27.97
>
> but hey its my birthday and my mother-in-law just sent me a $50
> check so what else should I spend found money on?
>
>
> On 02/07/2017 03:57 PM, Charles Moizeau w2sh@...
> <mailto:w2sh@...> [regenrx] wrote:
>
> A large quantity (1,300) of these selling for 10 bucks.
>
>
> www.goldmine-elec-products.com
> <http://www.goldmine-elec-products.com>.
>
>
> Item # G21712.
>
>
> Reported as selling out quickly.
>
>
> Charles
>
>
>
>
>
>

27671. Re: [regenrx] $10 Carbon Composition Resistors cost $27.97

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-08 17:22:24 UTC
From: Rajaram Bhat
Topic: 27666 Message: 27671

Electronic Goldmine’s shipping charge is a rip off. Others, like Mouser, charge a lot less.

Raj

> On Feb 8, 2017, at 7:15 AM, Alan Fryer n3bjdx@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
>
> I was ordering 2 lots and they wanted to charge me $28 shipping, so I backed off...
>
> Alan, N3BJ
>

27672. Re: Carbon Composition Resistors

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-08 23:09:30 UTC
From: Bry Carling
Topic: 27666 Message: 27672

I searched all over their web site, Charles. There is nothing like that showing up.

1300 of those 1 watt and two watt Carbon Comp resistors for $10 would have been a heck of a good price.

Did I miss something hidden on there??

Bry AF4K

From: regenrx@yahoogroups.com <regenrx@yahoogroups.com>
Sent: Tuesday, February 7, 2017 10:02 PM
To: regenrx@yahoogroups.com
Subject: [regenrx] Digest Number 4223

There are 2 messages in this issue.

Topics in this digest:

1a. Carbon Composition Resistors
From: Charles Moizeau
1b. Re: $10 Carbon Composition Resistors cost $27.97
From: Rob

Messages

1a. Carbon Composition Resistors
Posted by: "Charles Moizeau" w2sh@... charlesmoizeau
Date: Tue Feb 7, 2017 12:57 pm ((PST))

A large quantity (1,300) of these selling for 10 bucks.

www.goldmine-elec-products.com<http://www.goldmine-elec-products.com<http://www.goldmine-elec-products.com<http://www.goldmine-elec-products.com>>.

Item # G21712.

Reported as selling out quickly.

Charles

Messages in this topic (2)

1b. Re: $10 Carbon Composition Resistors cost $27.97
Posted by: "Rob" roomberg@... kb3byt
Date: Tue Feb 7, 2017 4:04 pm ((PST))

They charged me $17.97 for shipping so the total order came to $27.97

but hey its my birthday and my mother-in-law just sent me a $50 check so what else should I spend found money on?

On 02/07/2017 03:57 PM, Charles Moizeau w2sh@... [regenrx] wrote:
>
> A large quantity (1,300) of these selling for 10 bucks.
>
>
> www.goldmine-elec-products.com<http://www.goldmine-elec-products.com> <http://www.goldmine-elec-products.com>.
>
>
> Item # G21712.
>
>
> Reported as selling out quickly.
>
>
> Charles
>
>

Messages in this topic (2)

"In the interest of Regenerating radio's lost art of Regeneration"

Yahoo Groups Links

27673. RE: Carbon Composition Resistors

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-08 23:17:01 UTC
From: Hubert Miller
Topic: 27666 Message: 27673

I think you missed that the mix was not just 1 and 2 watters, and that the shipping was roughly twice
the product cost.
-Hue

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Wednesday, February 8, 2017 3:10 PM
To: regenrx@yahoogroups.com
Subject: [regenrx] Re: Carbon Composition Resistors

I searched all over their web site, Charles. There is nothing like that showing up.

1300 of those 1 watt and two watt Carbon Comp resistors for $10 would have been a heck of a good price.

Did I miss something hidden on there??

Bry AF4K

From: regenrx@yahoogroups.com<mailto:regenrx@yahoogroups.com>
<regenrx@yahoogroups.com<mailto:regenrx@yahoogroups.com>>
Sent: Tuesday, February 7, 2017 10:02 PM
To: regenrx@yahoogroups.com<mailto:regenrx@yahoogroups.com>
Subject: [regenrx] Digest Number 4223

There are 2 messages in this issue.

Topics in this digest:

1a. Carbon Composition Resistors
From: Charles Moizeau
1b. Re: $10 Carbon Composition Resistors cost $27.97
From: Rob

Messages

1a. Carbon Composition Resistors
Posted by: "Charles Moizeau" w2sh@...m<mailto:w2sh@...> charlesmoizeau
Date: Tue Feb 7, 2017 12:57 pm ((PST))

A large quantity (1,300) of these selling for 10 bucks.

www.goldmine-elec-products.com<http://www.goldmine-elec-products.com<http://www.goldmine-elec-products.com%3chttp:/www.goldmine-elec-products.com>>.

Item # G21712.

Reported as selling out quickly.

Charles

Messages in this topic (2)

1b. Re: $10 Carbon Composition Resistors cost $27.97
Posted by: "Rob" roomberg@...<mailto:roomberg@...> kb3byt
Date: Tue Feb 7, 2017 4:04 pm ((PST))

They charged me $17.97 for shipping so the total order came to $27.97

but hey its my birthday and my mother-in-law just sent me a $50 check so
what else should I spend found money on?

On 02/07/2017 03:57 PM, Charles Moizeau w2sh@...<mailto:w2sh@...> [regenrx] wrote:
>
> A large quantity (1,300) of these selling for 10 bucks.
>
>
> www.goldmine-elec-products.com<http://www.goldmine-elec-products.com>
<http://www.goldmine-elec-products.com>.
>
>
> Item # G21712.
>
>
> Reported as selling out quickly.
>
>
> Charles
>
>

Messages in this topic (2)

"In the interest of Regenerating radio's lost art of Regeneration"

Yahoo Groups Links

27674. Re: [regenrx] $10 Carbon Composition Resistors cost $27.97

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-09 05:36:53 UTC
From: Rob
Topic: 27666 Message: 27674

Does ANYone sell 1,300 CARBON COMPOSITE RESISTOR KITS for less than $30?

Perhaps I missed something on MOUSER.com but I could not locate ANY
carbon composite resistors there.
So low cost of shipping means nothing there.

On 02/08/2017 12:22 PM, Rajaram Bhat rbhat@... [regenrx] wrote:
>
> Electronic Goldmine’s shipping charge is a rip off. Others, like
> Mouser, charge a lot less.
>
>
> Raj
>
>> On Feb 8, 2017, at 7:15 AM, Alan Fryer n3bjdx@...
>> <mailto:n3bjdx@...> [regenrx] <regenrx@yahoogroups.com
>> <mailto:regenrx@yahoogroups.com>> wrote:
>>
>>
>> I was ordering 2 lots and they wanted to charge me $28 shipping, so I
>> backed off...
>>
>> Alan, N3BJ
>>
>
>

27675. Re: [regenrx] $10 Carbon Composition Resistors at Goldmine

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-09 06:42:05 UTC
From: Russ Williams
Topic: 27666 Message: 27675

All, I ordered 2 of those kits from Goldmine and paid $14 for shipping. There was an option to pay 12.99 for ground shipping. The kits are on the site under Home/Resistors/Resistor Assortments. Yes, the shipping is a bit high, but likely worth the cost given the amount of resistors purchased. I have spent hundreds of dollars at Mouser for specific items, so what the hell? Will report back....

Russ KW6T

From: "Rob roomberg@... [regenrx]" <regenrx@yahoogroups.com>
To: regenrx@yahoogroups.com
Sent: Wednesday, February 8, 2017 9:36 PM
Subject: Re: [regenrx] $10 Carbon Composition Resistors cost $27.97

  Does ANYone sell 1,300 CARBON COMPOSITE RESISTOR KITS for less than $30?

Perhaps I missed something on MOUSER.com but I could not locate ANY carbon composite resistors there.
So low cost of shipping means nothing there.

On 02/08/2017 12:22 PM, Rajaram Bhat rbhat@... [regenrx] wrote:

  Electronic Goldmine’s shipping charge is a rip off. Others, like Mouser, charge a lot less.
Raj

On Feb 8, 2017, at 7:15 AM, Alan Fryer n3bjdx@... [regenrx] <regenrx@yahoogroups.com> wrote:

I was ordering 2 lots and they wanted to charge me $28 shipping, so I backed off...
Alan, N3BJ

27676. Re: [regenrx] $10 Carbon Composition Resistors cost $27.97

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-09 11:00:48 UTC
From: buzzgiles@...
Topic: 27666 Message: 27676

Hi Guys,

I thought I was the only one that was ripped off by Electronic Goldmine. Electronic Goldmine and several other American online discount electronic parts companies are nothing more than resellers for China with a huge markup. Why don't you buy the same thing from Banggood or Aliexpress and cutout the middleman.

73 de Gary, KF9CM

27677. Re: [regenrx] $10 Carbon Composition Resistors cost $27.97

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-09 16:08:51 UTC
From: Robert Nickels
Topic: 27666 Message: 27677

On 2/8/2017 11:36 PM, Rob roomberg@... [regenrx] wrote:
>
> Perhaps I missed something on MOUSER.com but I could not locate ANY
> carbon composite resistors there.
> So low cost of shipping means nothing there.

If you enter "carbon composition resistor" in the search box at the top of the Mouser page, it will show you the available parts from Kamaya, Ohmite, TE Connectivity and TT Electronics in 1/4, 1/2, and 1 watt power ratings. What you will not like is the price - 1/2 watt values run about 70 cents each in qty 10 and 50 cents each at qty 100.

Better prices can be found at the places that cater to audiopile and guitar amp builders, who like it or not are the only reason tubes and tube-related components are available at all these days. For example:

https://www.tubedepot.com/products/1-2-watt-carbon-composition-resistors

Click on "bulk pricing", which varies by value but averages around 20 cents each. This is just one such source but finding carbon comps for a penny or two each like we used to pay is not likely due to the decreasing demand for composition resistors.

For those looking to stock their parts cabinets with carbon comps the All Electronics grab-bag is a bargain based on current prices for new parts.

73, Bob W9RAN

27678. Variable Capacitors / Condenser

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-09 16:31:06 UTC
From: davesmith1@...
Topic: 27678 Message: 27678

Does any make there Variable Capacitors / Condenser
If so what do you make the Variable Capacitors / Condenser and type

Dave

27679. Re: [regenrx] $10 Carbon Composition Resistors at Goldmine

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-09 16:31:53 UTC
From: Robert Nickels
Topic: 27666 Message: 27679

On 2/9/2017 12:42 AM, Russ Williams hrd998cc@... [regenrx] wrote:
> those kits from Goldmine

I incorrectly referred to "All Electronics" as the source when it should have been "Electronic Goldmine". Sorry for the error.

Also - those who attend hamfests and electronic swapmeets will want to keep an eye open for parts cabinets and "boxes under the table" where I've scored most of my inventory of carbon comps and others. It's luck of the draw but with the declining interest in homebrewing oftentimes you can but the whole works for what the seller thinks the cabinet is worth. I had one offer to "dump those drawers out to make it lighter to carry" but I declined the offer ;-)

73, Bob W9RAN

27680. Re: [regenrx] $10 Carbon Composition Resistors cost $27.97

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-09 16:45:20 UTC
From: Rajaram Bhat
Topic: 27666 Message: 27680

I was not saying that Mouser has carbon composition resistor but just comparing shipping charges. In any case, I don’t subscribe to the belief about the superiority of carbon comp resistors. It is a belief that is not scientifically based. Sorry if I have offended anyone about this.

Raj

> On Feb 9, 2017, at 12:36 AM, Rob roomberg@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
> Does ANYone sell 1,300 CARBON COMPOSITE RESISTOR KITS for less than $30?
>
> Perhaps I missed something on MOUSER.com <http://mouser.com/> but I could not locate ANY carbon composite resistors there.
> So low cost of shipping means nothing there.
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> On 02/08/2017 12:22 PM, Rajaram Bhat rbhat@... <mailto:rbhat@...> [regenrx] wrote:
>>
>> Electronic Goldmine’s shipping charge is a rip off. Others, like Mouser, charge a lot less.
>>
>>
>> Raj
>>

27681. RE: [regenrx] $10 Carbon Composition Resistors cost $27.97

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-09 17:01:13 UTC
From: Larry
Topic: 27666 Message: 27681

I have always heard to use carbon comp resistors on the line neutral to your circuit ground. Supposedly the carbon comp can take the spikes involved. 100K is the usual value.

Larry

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Thursday, February 09, 2017 11:45 AM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] $10 Carbon Composition Resistors cost $27.97

I was not saying that Mouser has carbon composition resistor but just comparing shipping charges. In any case, I don’t subscribe to the belief about the superiority of carbon comp resistors. It is a belief that is not scientifically based. Sorry if I have offended anyone about this.

Raj

On Feb 9, 2017, at 12:36 AM, Rob roomberg@... [regenrx] <regenrx@yahoogroups.com> wrote:

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Perhaps I missed something on <http://mouser.com/> MOUSER.com but I could not locate ANY carbon composite resistors there.
So low cost of shipping means nothing there.

On 02/08/2017 12:22 PM, Rajaram Bhat rbhat@... [regenrx] wrote:

Electronic Goldmine’s shipping charge is a rip off. Others, like Mouser, charge a lot less.

Raj

27682. Re: [regenrx] $10 Carbon Composition Resistors cost $27.97

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-09 17:10:45 UTC
From: Phil
Topic: 27666 Message: 27682

When R/S announced that they were closing all the local stores I decided I needed to put in some 'bench stock' for when I homebrew something, OR when I repair somebodies radio (local hams only, as a rule I don't do mail-order repairs). While I didn't routinely buy stuff from R/S (too expensive), they were my go-to place for an emergency resistor, or whatever.

I 'discovered' that parts assortments from Amazon was a good investment, and for several months I spent my 'mad money' ordering from them. I ordered an assortment of 1W 5%, resistors, an assortment of 1/2W 1% resistors, and an assortment of 1/4W 1% resistors. They are all carbon film, and every one I tested was well within tolerance (NOS carbon Comp can drift way off value).

I also ordered a number of capacitor assortments (mostly Low Voltage), Mylar, ceramic, 'lytic, you name it, as well as an assortment of 2KV Ceramic disks.

And finally, I ordered some different Solid State assortments (rectifiers, Zeners, Transistors, varactors, FETS, you name it) , as well as a LARGE assortment of 1N400x rectifiers, etc. Yeah, I probably won't need most of the stuff, but if/when I do need something, chances are I have it. So far, when I repaired some radios for local hams, and homebrewed a few things, I've had every part I needed. A lot better than ordering parts in onesies and twosies and paying the shipping. Of course I KNOW that on occasion I'll need to order a special IC or maybe an RF power transistor.

As a side note, If your order is large enough, shipping at Amazon is free. . .

73 de Phil, KO6BB.
Specializing in DXing NDBs (Longwave Beacons).

Location: "The Beaconeer's Lair".
Merced, Central California, 37,18,37N 120,30,6W CM97rh
http://www.qsl.net/ko6bb/

HF/LF RADIOS:
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
PORTABLES: Realistic DX380, Grundig G6 Aviator, Grundig S450DLX
Icom: IC-7200 Xceiver, DSP IF & filters (~2015).
Kenwood: TS-450SAT Xceiver, cascaded 250/125Hz Inrad filters.
SDR: Softrock Ensemble II LF (built from a kit 2015).

ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 4 Port Antenna Multicoupler, Feeds 4 RX's.
AF Filters: Timewave DSP-599zx & HOMEBREW 8 Hz Filter.

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.
Cushcraft AR-10 Ringo at 14 feet AGL for 10M beacon.

On 2/9/2017 4:45 PM, Rajaram Bhat rbhat@... [regenrx] wrote:
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> I was not saying that Mouser has carbon composition resistor but just
> comparing shipping charges. In any case, I don’t subscribe to the
> belief about the superiority of carbon comp resistors. It is a belief
> that is not scientifically based. Sorry if I have offended anyone
> about this.
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>
> Raj
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27683. Re: [regenrx] Variable Capacitors / Condenser

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-09 17:39:51 UTC
From: J Ed
Topic: 27678 Message: 27683

I have tried fabricating a couple of variable capacitors with disappointing results. I used threaded rod with cut aluminum sheets. Here are some key lessons I learned.

- a drill press is mandatory. You won't get decent results with a drill unless you happen to have world class drill skill.

- flatness of the plates is key. If you can't get the plates flat, you're not going to have a capacitor. This is harder to do than you think. Don't buy plate material in a roll, get flat sheets.

- the best way to cut out plates is by laser or a CNC router. A coping saw would work if you sandwich the plates between wood. Least effective is scissors or metal snips. It's much harder to flatten bent plates than to keep them flat.

- this is one of those things where you will build a few before you make a good product. Build a larger one first, either spaced with air or sheets of Mylar. Remember you are likely going to have less maximum capacitance than you want.

- draw out the whole thing on paper before buying materials. Draw every detail and know before hand how you want to make electrical connections, mount the rotor, so forth. It will help out a lot if you don't make it up as you go.

Hope this helps. I'd like to do this more, but good metal is expensive.

Ed AE7TE

On Feb 9, 2017 8:31 AM, "davesmith1@... [regenrx]" <
regenrx@yahoogroups.com> wrote:

>
>
> Does any make there Variable Capacitors / Condenser
>
> If so what do you make the Variable Capacitors / Condenser and type
>
>
> Dave
>
>
>
>
>

27684. Re: [regenrx] Variable Capacitors / Condenser

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-09 18:10:29 UTC
From: davesmith1@...
Topic: 27678 Message: 27684

I just planning stage see how to
I have one made of steel and one made of alumina
I have seen on very old ones made of brass

I am thinking of making the rotor out bar stock instead of the cnc router

Dave

27685. Re: [regenrx] Variable Capacitors / Condenser

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-09 19:15:59 UTC
From: J Ed
Topic: 27678 Message: 27685

Were you to make the rotor shaft from bar stock, it could work provided you use a square stock or something that could facilitate rotation. Soldering brass plates to the rotor is another option.

If you use a non-circular rod, you also need the ability to cut or machine holes which will allow a snug fit on the drive shaft.

I've always used threaded rod with nuts as spacers. Usually I have to use two.

Ed AE7TE

On Feb 9, 2017 10:10 AM, "davesmith1@... [regenrx]" <
regenrx@yahoogroups.com> wrote:

>
>
> I just planning stage see how to
> I have one made of steel and one made of alumina
> I have seen on very old ones made of brass
>
> I am thinking of making the rotor out bar stock instead of the cnc router
>
> Dave
>
>
>

27686. Carbon Composition Resistors verses new carbon verses metal film resistors

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-09 21:38:24 UTC
From: Rob
Topic: 27666 Message: 27686

It really doesn't matter about the cost when you buy them in bulk....
1,000 at a time.....
the price with shipping tops out at 2 cents.

What I want to know is WHY anyone would use the brown body Carbon Comp
resistors instead of the tan or blue resistors.

MY interest here is strictly for the vintage look when building replica
old timey radios.
BUT
Is it a bad idea to use these resistors for any electronic reason?

On 02/09/2017 11:45 AM, Rajaram Bhat rbhat@... [regenrx] wrote:
>
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> comparing shipping charges. In any case, I don’t subscribe to the
> belief about the superiority of carbon comp resistors. It is a belief
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> about this.
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>> On Feb 9, 2017, at 12:36 AM, Rob roomberg@...
>> <mailto:roomberg@...> [regenrx] <regenrx@yahoogroups.com
>> <mailto:regenrx@yahoogroups.com>> wrote:
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>> Does ANYone sell 1,300 CARBON COMPOSITE RESISTOR KITS for less than $30?
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>> Perhaps I missed something onMOUSER.com <http://mouser.com/>but I
>> could not locate ANY carbon composite resistors there.
>> So low cost of shipping means nothing there.
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>> On 02/08/2017 12:22 PM, Rajaram Bhatrbhat@...[regenrx] wrote:
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>>> Electronic Goldmine’s shipping charge is a rip off. Others, like
>>> Mouser, charge a lot less.
>>>
>>>
>>> Raj
>>>

>
>

27687. Re: [regenrx] Variable Capacitors / Condenser

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-09 21:37:17 UTC
From: davesmith1@...
Topic: 27678 Message: 27687

I have also look at using Fender Washers and just cut them in have and use al frat bar for stator
Trying to keep it simple and but still works good

Dave

27688. Re: [regenrx] Variable Capacitors / Condenser

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-09 22:27:32 UTC
From: Jim Scott
Topic: 27678 Message: 27688

Just in case this is not known...

The folks at midnightscience.com have commercially made 365pf variable capacitors available.
They are more about crystal sets, but have some hobby stuff too.

Anyway, both single and dual gang variable capacitors are available, plus a recently introduced single 365pf with 8:1 reduction!
http://www.shopping-cart.midnightscience.net/t/capacitors

I get a newsletter from them every quarter, and they show up at the QRP conference in Branson each April.

73,

Jim Scott
WB0IYC
Life Member ARRL
FISTS 15327
Joplin, MO EM27RC
http://www.wb0iyc.com

The whole universe is waiting...
http://www.jpl.nasa.gov/

-----Original Message-----
From: J Ed jedwardsat1@... [regenrx] [mailto:regenrx@yahoogroups.com]
Sent: Thursday, February 9, 2017 01:15 PM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Variable Capacitors / Condenser

Were you to make the rotor shaft from bar stock, it could work provided you use a square stock or something that could facilitate rotation. Soldering brass plates to the rotor is another option.

If you use a non-circular rod, you also need the ability to cut or machine holes which will allow a snug fit on the drive shaft.

I've always used threaded rod with nuts as spacers. Usually I have to use two.

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On Feb 9, 2017 10:10 AM, "davesmith1@... [regenrx]" <regenrx@yahoogroups.com> wrote:

I just planning stage see how to
I have one made of steel and one made of alumina
I have seen on very old ones made of brass

I am thinking of making the rotor out bar stock instead of the cnc router

Dave

27689. Re: [regenrx] $10 Carbon Composition Resistors cost $27.97

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-09 17:09:41 UTC
From: Phil
Topic: 27666 Message: 27689

When R/S announced that they were closing all the local stores I decided I needed to put in some 'bench stock' for when I homebrew something, OR when I repair somebodies radio (local hams only, as a rule I don't do mail-order repairs). While I didn't routinely buy stuff from R/S (too expensive), they were my go-to place for an emergency resistor, or whatever.

I 'discovered' that parts assortments from Amazon was a good investment, and for several months I spent my 'mad money' ordering from them. I ordered an assortment of 1W 5%, resistors, an assortment of 1/2W 1% resistors, and an assortment of 1/4W 1% resistors. They are all carbon film, and every one I tested was well within tolerance (NOS carbon Comp can drift way off value).

I also ordered a number of capacitor assortments (mostly Low Voltage), Mylar, ceramic, 'lytic, you name it, as well as an assortment of 2KV Ceramic disks.

And finally, I ordered some different Solid State assortments (rectifiers, Zeners, Transistors, varactors, FETS, you name it) , as well as a LARGE assortment of 1N400x rectifiers, etc. Yeah, I probably won't need most of the stuff, but if/when I do need something, chances are I have it. So far, when I repaired some radios for local hams, and homebrewed a few things, I've had every part I needed. A lot better than ordering parts in onesies and twosies and paying the shipping. Of course I KNOW that on occasion I'll need to order a special IC or maybe an RF power transistor.

73 de Phil, KO6BB.
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Location: "The Beaconeer's Lair".
Merced, Central California, 37,18,37N 120,30,6W CM97rh
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HF/LF RADIOS:
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
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On 2/9/2017 4:45 PM, Rajaram Bhat rbhat@... [regenrx] wrote:
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> I was not saying that Mouser has carbon composition resistor but just
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> belief about the superiority of carbon comp resistors. It is a belief
> that is not scientifically based. Sorry if I have offended anyone
> about this.
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> Raj
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27690. Re: [regenrx] Carbon Composition Resistors verses new carbon verses metal film resistors

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-09 22:57:27 UTC
From: Rajaram Bhat
Topic: 27666 Message: 27690

Carbon comp resistors produce higher noise level. This may not be important in radios, particularly vintage ones. However, it makes a big difference in hifi audio equipment. That said, there is a cult around carbon comp resistors and some vacuum tube audio guys like to use them.

Raj

> On Feb 9, 2017, at 4:38 PM, Rob roomberg@... [regenrx] <regenrx@...m> wrote:
>
> It really doesn't matter about the cost when you buy them in bulk.... 1,000 at a time.....
> the price with shipping tops out at 2 cents.
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> What I want to know is WHY anyone would use the brown body Carbon Comp resistors instead of the tan or blue resistors.
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> MY interest here is strictly for the vintage look when building replica old timey radios.
> BUT
> Is it a bad idea to use these resistors for any electronic reason?
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>>> On Feb 9, 2017, at 12:36 AM, Rob <mailto:roomberg@...>roomberg@... <mailto:roomberg@...> [regenrx] <regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>> wrote:
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less.
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>>>> Raj
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27691. Re: [regenrx] Carbon Composition Resistors verses new carbon verses metal film resistors

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-10 01:39:25 UTC
From: Richard
Topic: 27666 Message: 27691

I think it depends on the application. Carbon resistors are
non-inductive and are useful as "stopping" resistors in audio circuits,
and parasitic damping resistors in radio circuits. (same thing) They
also age badly. Other than that, I think the newer resistors are better.

Richard, AA1P

On 02/09/2017 05:57 PM, Rajaram Bhat rbhat@... [regenrx] wrote:
>
> Carbon comp resistors produce higher noise level. This may not be
> important in radios, particularly vintage ones. However, it makes a
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27692. Re: Variable Capacitors / Condenser

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-10 01:50:07 UTC
From: johnhutnick@...
Topic: 27678 Message: 27692

Go to the Regenrx2 group and look at photos under my name -- johnhutnick. There are two variable capacitors that I made. One was made with pieces of tin can tops, threaded rod and nuts, plywood ends. The other is a large, flat sliding plate variable on wood block with tinplate sliders.

27693. Re: [regenrx] Carbon Composition Resistors verses new carbon verses metal film resistors

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-10 02:17:08 UTC
From: Tom Lee
Topic: 27666 Message: 27693

They definitely produce more "1/f" noise than do film resistors, with the noise increasing with dc bias current. Since it is 1/f noise, it not only affects audio/baseband circuits, it also pollutes local oscillators, where this noise converts into noise near the carrier. So, it can still degrade RF circuits through this mechanism.

--Tom

--
Prof. Thomas H. Lee
Allen Bldg., CIS-205
420 Via Palou Mall
Stanford University
Stanford, CA 94305-4070
http://www-smirc.stanford.edu
650-725-3383 (public fax; no confidential information, please)

On 2/9/2017 2:57 PM, Rajaram Bhat rbhat@... [regenrx] wrote:
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27694. Re: Variable Capacitors / Condenser

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-10 03:01:27 UTC
From: davesmith1@...
Topic: 27678 Message: 27694

I look at both of them looks great
Simple to build

Thank you
Dave

27695. Re: [regenrx] Carbon Composition Resistors verses new carbon verses metal film resistors

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-10 03:42:28 UTC
From: Rajaram Bhat
Topic: 27666 Message: 27695

Thank you Tom for indicating that it may affect radio circuits as well.

Raj

> On Feb 9, 2017, at 9:17 PM, Tom Lee tomlee@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
> They definitely produce more "1/f" noise than do film resistors, with the noise increasing with dc bias current. Since it is 1/f noise, it not only affects audio/baseband circuits, it also pollutes local oscillators, where this noise converts into noise near the carrier. So, it can still degrade RF circuits through this mechanism.
>
> --Tom
>
> --
> Prof. Thomas H. Lee
> Allen Bldg., CIS-205
> 420 Via Palou Mall
> Stanford University
> Stanford, CA 94305-4070
> http://www-smirc.stanford.edu <http://www-smirc.stanford.edu/>
> 650-725-3383 (public fax; no confidential information, please)
> On 2/9/2017 2:57 PM, Rajaram Bhat rbhat@... <mailto:rbhat@...> [regenrx] wrote:
>>
>> Carbon comp resistors produce higher noise level. This may not be important in radios, particularly vintage ones. However, it makes a big difference in hifi audio equipment. That said, there is a cult around carbon comp resistors and some vacuum tube audio guys like to use them.
>>
>>
>> Raj
>>
>>> On Feb 9, 2017, at 4:38 PM, Rob roomberg@... <mailto:roomberg@...> [regenrx] <regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>> wrote:
>>>
>>> It really doesn't matter about the cost when you buy them in bulk.... 1,000 at a time.....
>>> the price with shipping tops out at 2 cents.
>>>
>>> What I want to know is WHY anyone would use the brown body Carbon Comp resistors instead of the tan or blue resistors.
>>>
>>> MY interest here is strictly for the vintage look when building replica old timey radios.
>>> BUT

>>> Is it a bad idea to use these resistors for any electronic reason?
>>>
>>>
>>>
>>>
>>>
>>>
>>> On 02/09/2017 11:45 AM, Rajaram Bhat rbhat@... <mailto:rbhat@...> [regenrx] wrote:
>>>>
>>>> I was not saying that Mouser has carbon composition resistor but just comparing shipping charges. In any case, I don't subscribe to the belief about the superiority of carbon comp resistors. It is a belief that is not scientifically based. Sorry if I have offended anyone about this.
>>>>
>>>>
>>>> Raj
>>>>
>>>>
>>>>> On Feb 9, 2017, at 12:36 AM, Rob roomberg@ptd.net <mailto:roomberg@...> [regenrx] <regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>> wrote:
>>>>>
>>>>> Does ANYone sell 1,300 CARBON COMPOSITE RESISTOR KITS for less than $30?
>>>>>
>>>>> Perhaps I missed something on MOUSER.com <http://mouser.com/> but I could not locate ANY carbon composite resistors there.
>>>>> So low cost of shipping means nothing there.
>>>>>
>>>>>
>>>>>
>>>>>
>>>>> On 02/08/2017 12:22 PM, Rajaram Bhat rbhat@... <mailto:rbhat@...> [regenrx] wrote:
>>>>>>
>>>>>> Electronic Goldmine's shipping charge is a rip off. Others, like Mouser, charge a lot less.
>>>>>>
>>>>>>
>>>>>> Raj
>>>>>>
>>>>
>>

27696. WTB A book on Regens

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-10 04:02:07 UTC
From: William Wood
Topic: 27696 Message: 27696

Just posted this in a sister
group, and hoping maybe posting it
here might bring some results.
Thanks Guys
Bill

>>> Clip

Greetings Electron Benders
Been looking for a book that is out
of print. It’s Surviving Technology by
Bruce Vaughn NR5Q. Tried Amazon,
Ebay and the Inter-library loans and no go.
Tried Electronic Radio and I can’t seem
to find a copy.
I would like to beg borrow buy or steal
a copy of this book. It’s main point as far
as I know is to get the most out of a regen.
Thanks for the Bandwidth Guys
73 fer now
Bill KE9XQ

27697. Re: [regenrx] WTB A book on Regens

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-10 04:33:49 UTC
From: Cecil Bayona
Topic: 27696 Message: 27697

Try contacting the editor at this publication, they were suppose to sell
it but I don't see it listed. However the title is "Every Blade of Grass".

Sorry I forgot the link;
< https://www.ermag.com/ >

On 2/9/2017 10:02 PM, William Wood ke9xq@... [regenrx] wrote:
> Just posted this in a sister
> group, and hoping maybe posting it
> here might bring some results.
> Thanks Guys
> Bill
>
>>>> Clip
>
>
> Greetings Electron Benders
> Been looking for a book that is out
> of print. It’s Surviving Technology by
> Bruce Vaughn NR5Q. Tried Amazon,
> Ebay and the Inter-library loans and no go.
> Tried Electronic Radio and I can’t seem
> to find a copy.
> I would like to beg borrow buy or steal
> a copy of this book. It’s main point as far
> as I know is to get the most out of a regen.
> Thanks for the Bandwidth Guys
> 73 fer now
> Bill KE9XQ
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> "In the interest of Regenerating radio's lost art of Regeneration"
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Cecil - k5nwa
http://thepartsplace.k5nwa.com/

27698. Re: [regenrx] Variable Capacitors / Condenser

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-10 14:09:38 UTC
From: davesmith1@...
Topic: 27678 Message: 27698

Jim Scott
like web site it does have the galena detector rook and formulas that help too
This will be helpful not having find some of parts

I am wanting to build almost all the parts in my shop do have on the shelf Variable cap and 1N34A

Thank you
Dave

27699. Re: [regenrx] Variable Capacitors / Condenser

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-10 15:14:57 UTC
From: Jim Scott
Topic: 27678 Message: 27699

I live in Joplin Missouri, USA and in the late 1800's, both Lead and Zinc were discovered here. The last mines shut down around 1970. It was labeled as the Tri-State Lead and Zinc mining area, and I was told that it had the distinction of being the 3rd largest supplier in the world in the early 1900's.

Anyway, the mineral museum has small chunks of "galena" mined from around here available. I have been able to harvest some small pieces from old tailing piles.

I have some here.

73,

Jim Scott
WB0IYC
Life Member ARRL
FISTS 15327
Joplin, MO EM27RC
http://www.wb0iyc.com

The whole universe is waiting...
http://www.jpl.nasa.gov/
-----Original Message-----
From: davesmith1@... [regenrx] [mailto:regenrx@yahoogroups.com]
Sent: Friday, February 10, 2017 08:09 AM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Variable Capacitors / Condenser

Jim Scott
like web site it does have the galena detector rook and formulas that help too
This will be helpful not having find some of parts

I am wanting to build almost all the parts in my shop do have on the shelf Variable cap and 1N34A

Thank you
Dave

27700. Re: [regenrx] Variable Capacitors / Condenser

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-10 15:19:42 UTC
From: Cecil Bayona
Topic: 27678 Message: 27700

If they have Galena then they have lead deposits also, Galena is made
from lead.

On 2/10/2017 9:14 AM, 'Jim Scott' jim.scott@...
[regenrx] wrote:
>
>
> I live in Joplin Missouri, USA and in the late 1800's, both Lead and
> Zinc were discovered here. The last mines shut down around 1970. It
> was labeled as the Tri-State Lead and Zinc mining area, and I was told
> that it had the distinction of being the 3rd largest supplier in the
> world in the early 1900's.
>
> Anyway, the mineral museum has small chunks of "galena" mined from
> around here available. I have been able to harvest some small pieces
> from old tailing piles.
>
> I have some here.
>
> 73,
>
> Jim Scott
> WB0IYC
> Life Member ARRL
> FISTS 15327
> Joplin, MO EM27RC
> http://www.wb0iyc.com
>
>
>
> The whole universe is waiting...
> http://www.jpl.nasa.gov/
>
>
>
> -----Original Message-----
> *From:* davesmith1@... [regenrx]
> [mailto:regenrx@yahoogroups.com]
> *Sent:* Friday, February 10, 2017 08:09 AM
> *To:* regenrx@yahoogroups.com
> *Subject:* Re: [regenrx] Variable Capacitors / Condenser
>
> Jim Scott
> like web site it does have the galena detector rook and formulas
> that help too

> This will be helpful not having find some of parts
>
> I am wanting to build almost all the parts in my shop do have on the
> shelf Variable cap and 1N34A
>
> Thank you
> Dave
>
>
>
>
>
> ---
> Posted by: "Jim Scott" <jim.scott@...>

--
Cecil - k5nwa
http://thepartsplace.k5nwa.com/

27701. Re: [regenrx] WTB A book on Regens

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-10 04:33:07 UTC
From: Cecil Bayona
Topic: 27696 Message: 27701

Try contacting the editor at this publication, they were suppose to sell
it but I don't see it listed. However the title is "Every Blade of Grass".

On 2/9/2017 10:02 PM, William Wood ke9xq@... [regenrx] wrote:
> Just posted this in a sister
> group, and hoping maybe posting it
> here might bring some results.
> Thanks Guys
> Bill
>
>>>> Clip
>
>
> Greetings Electron Benders
> Been looking for a book that is out
> of print. It’s Surviving Technology by
> Bruce Vaughn NR5Q. Tried Amazon,
> Ebay and the Inter-library loans and no go.
> Tried Electronic Radio and I can’t seem
> to find a copy.
> I would like to beg borrow buy or steal
> a copy of this book. It’s main point as far
> as I know is to get the most out of a regen.
> Thanks for the Bandwidth Guys
> 73 fer now
> Bill KE9XQ
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> "In the interest of Regenerating radio's lost art of Regeneration"
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Cecil - k5nwa
http://thepartsplace.k5nwa.com/

27702. Re: [regenrx] Variable Capacitors / Condenser

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-10 19:20:55 UTC
From: Michael
Topic: 27678 Message: 27702

Building a variable capacitor is no-sweat.
Whether linear or logarithmic is secondary.
Merits an online peek at WW2 POW ingenuity...

Galena will, however, be the new rare metal if Father Sun
(or Badboys) burps and wipes out our chip-enslaved world...

Michael UK

PS: Smug, I have a Galena sugget from a SK neighbour -
and a few vintage tubes...

On 10.02.17 15:14, 'Jim Scott' jim.scott@... [regenrx]
wrote:

> Anyway, the mineral museum has small chunks of "galena" mined from
> around here available. I have been able to harvest some small pieces
> from old tailing piles. I have some here.
> Jim Scott

27703. Re: [regenrx] WTB A book on Regens

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-10 19:22:18 UTC
From: john ruccolo
Topic: 27696 Message: 27703

I did check this month's issue of ER on your behalf, but it is no longer listed in the books section.

You should try contacting the ER editor ray@ermag.com.

Good Luck!

Bruce Vaughn is a silent key now, so it's not clear if his book will ever be reprinted.

Regards,

John

Sent from my CRM-114

> On Feb 9, 2017, at 11:33 PM, Cecil Bayona cecil.bayona@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
> Try contacting the editor at this publication, they were suppose to sell
> it but I don't see it listed. However the title is "Every Blade of Grass".
>
> On 2/9/2017 10:02 PM, William Wood ke9xq@... [regenrx] wrote:
> > Just posted this in a sister
> > group, and hoping maybe posting it
> > here might bring some results.
> > Thanks Guys
> > Bill
> >
> >>>> Clip
> >
> >
> > Greetings Electron Benders
> > Been looking for a book that is out
> > of print. It’s Surviving Technology by
> > Bruce Vaughn NR5Q. Tried Amazon,
> > Ebay and the Inter-library loans and no go.
> > Tried Electronic Radio and I can’t seem
> > to find a copy.
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> > a copy of this book. It’s main point as far
> > as I know is to get the most out of a regen.
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> > "In the interest of Regenerating radio's lost art of Regeneration"
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> --
> Cecil - k5nwa
> http://thepartsplace.k5nwa.com/
>

27704. Re: [regenrx] WTB A book on Regens

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-10 19:51:15 UTC
From: Billy Watson
Topic: 27696 Message: 27704

try this

http://www.bookfinder.com/search/?ac=sl&st=sl&ref=bf_s2_a1_t1_1&qi=xTXttU924fZgD3F4N.uCLSTZ4Q0_1453081637_1:107:708&bq=author%3Dnr5q%2520bruce%2520vaughan%26title%3Dsurviving%2520technology

On Thu, Feb 9, 2017 at 10:02 PM, William Wood ke9xq@... [regenrx] <regenrx@yahoogroups.com> wrote:

> Just posted this in a sister
> group, and hoping maybe posting it
> here might bring some results.
> Thanks Guys
> Bill
>
> >>> Clip
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>
> Greetings Electron Benders
> Been looking for a book that is out
> of print. It’s Surviving Technology by
> Bruce Vaughn NR5Q. Tried Amazon,
> Ebay and the Inter-library loans and no go.
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> 73 fer now
> Bill KE9XQ
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> Yahoo Groups Links
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27705. Re: [regenrx] WTB A book on Regens

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-10 20:08:08 UTC
From: Theosleaper
Topic: 27696 Message: 27705

Seems to me that there is a used book store called albris. So maybe
albris.com will connect.
Any university town might have used bookstores too.
Rick K1WYH

On 2/10/2017 2:22 PM, john ruccolo jr6v6gt@... [regenrx] wrote:
> I did check this month's issue of ER on your behalf, but it is no
> longer listed in the books section.
>
> You should try contacting the ER editor ray@...
> <mailto:ray@...>.
>
> Good Luck!
>
> Bruce Vaughn is a silent key now, so it's not clear if his book will
> ever be reprinted.
>
> Regards,
>
> John
>
> Sent from my CRM-114
>
> On Feb 9, 2017, at 11:33 PM, Cecil Bayona cecil.bayona@...
> <mailto:cecil.bayona@...> [regenrx] <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>> wrote:
>
>> Try contacting the editor at this publication, they were suppose to sell
>> it but I don't see it listed. However the title is "Every Blade of
>> Grass".
>>
>> On 2/9/2017 10:02 PM, William Wood ke9xq@...
>> <mailto:ke9xq@...> [regenrx] wrote:
>> > Just posted this in a sister
>> > group, and hoping maybe posting it
>> > here might bring some results.
>> > Thanks Guys
>> > Bill
>> >
>> >>>> Clip
>> >
>> >
>> > Greetings Electron Benders
>> > Been looking for a book that is out
>> > of print. It’s Surviving Technology by

>> > Bruce Vaughn NR5Q. Tried Amazon,
>> > Ebay and the Inter-library loans and no go.
>> > Tried Electronic Radio and I can’t seem
>> > to find a copy.
>> > I would like to beg borrow buy or steal
>> > a copy of this book. It’s main point as far
>> > as I know is to get the most out of a regen.
>> > Thanks for the Bandwidth Guys
>> > 73 fer now
>> > Bill KE9XQ
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>> > "In the interest of Regenerating radio's lost art of Regeneration"
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>> --
>> Cecil - k5nwa
>> http://thepartsplace.k5nwa.com/
>>
>

27706. Re: [regenrx] WTB A book on Regens

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-10 20:16:43 UTC
From: Theosleaper
Topic: 27696 Message: 27706

Do a search for used book. It was Alibris not albris. Also try abebooks.
Rick K1WYH

On 2/10/2017 3:08 PM, Theosleaper theosleaper@... [regenrx] wrote:
>
>
> Seems to me that there is a used book store called albris. So maybe
> albris.com will connect.
> Any university town might have used bookstores too.
> Rick K1WYH
>
> On 2/10/2017 2:22 PM, john ruccolo jr6v6gt@... [regenrx] wrote:
>> I did check this month's issue of ER on your behalf, but it is no
>> longer listed in the books section.
>>
>> You should try contacting the ER editor ray@...
>> <mailto:ray@...>.
>>
>> Good Luck!
>>
>> Bruce Vaughn is a silent key now, so it's not clear if his book will
>> ever be reprinted.
>>
>> Regards,
>>
>> John
>>
>> Sent from my CRM-114
>>
>> On Feb 9, 2017, at 11:33 PM, Cecil Bayona cecil.bayona@...
>> <mailto:cecil.bayona@...> [regenrx] <regenrx@yahoogroups.com
>> <mailto:regenrx@yahoogroups.com>> wrote:
>>
>>> Try contacting the editor at this publication, they were suppose to
>>> sell
>>> it but I don't see it listed. However the title is "Every Blade of
>>> Grass".
>>>
>>> On 2/9/2017 10:02 PM, William Wood ke9xq@...
>>> <mailto:ke9xq@...> [regenrx] wrote:
>>> > Just posted this in a sister
>>> > group, and hoping maybe posting it
>>> > here might bring some results.
>>> > Thanks Guys
>>> > Bill

>>> >
>>> >>>> Clip
>>> >
>>> >
>>> > Greetings Electron Benders
>>> > Been looking for a book that is out
>>> > of print. It’s Surviving Technology by
>>> > Bruce Vaughn NR5Q. Tried Amazon,
>>> > Ebay and the Inter-library loans and no go.
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>>> --
>>> Cecil - k5nwa
>>> http://thepartsplace.k5nwa.com/
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27707. Re: [regenrx] WTB A book on Regens

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-10 20:36:07 UTC
From: Billy Watson
Topic: 27696 Message: 27707

you can contact Bruce's family here : http://nr5q.com/?page_id=497

On Thu, Feb 9, 2017 at 10:02 PM, William Wood ke9xq@... [regenrx] <
regenrx@yahoogroups.com> wrote:

> Just posted this in a sister
> group, and hoping maybe posting it
> here might bring some results.
> Thanks Guys
> Bill
>
> >>> Clip
>
>
> Greetings Electron Benders
> Been looking for a book that is out
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> Bruce Vaughn NR5Q. Tried Amazon,
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> Yahoo Groups Links
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27708. Re: [regenrx] Variable Capacitors / Condenser

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-10 21:31:40 UTC
From: davesmith1@...
Topic: 27678 Message: 27708

I think it more interesting to build the parts in my shop than using off the shelf parts
I even looking in making head phones this part may not happen
so any thing you may and ideal please let me know
I was 4 years and just did have time as my wife and self had little work on our home and work got the way too. Starting whit new roof and work our way down

here my group web page https://groups.yahoo.com/neo/groups/southbendlathe9/info
https://groups.yahoo.com/neo/groups/southbendlathe9/info

Dave

27709. Re: [regenrx] Variable Capacitors / Condenser

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-10 22:02:40 UTC
From: Robert Nickels
Topic: 27678 Message: 27709

On 2/10/2017 9:14 AM, 'Jim Scott' jim.scott@...
[regenrx] wrote:
> I have been able to harvest some small pieces from old tailing piles.
That's interesting Jim, as I also live in a former lead mining area here
in the Driftless Area of NW Illinois, where lead mining at Galena IL
made it a much larger settlement than Chicago in the early years.
There are tailings pile visible near the tiny community of New Diggings
just across the Wisconsin state line and I've wanted to do a little
prospecting some time, if I could get permission or at least not get
shot at ;-)

73, Bob W9RAN

27710. Re: Variable Capacitors / Condenser

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-10 22:25:20 UTC
From: dulmagedon@...
Topic: 27678 Message: 27710

I have made a few. You probably want pro looking ones and I was making them from garbage for the POW Radio Build a Shortwave one tube regen built totally from garbage dumb findings. So I used soup can lids. Threaded rod does Not work well because it does not have good quality thread. Fine thread bolts work well. When cutting or drilling the plates sandwich them between wood blocks which are bolted together and cut or drill them all together. That gives better edges and allows for no bending. large washers can also be used for plates if cut just above the centre hole also bolted together between blocks of wood. (Plywood for instance) End Good quality fine thread bolts and nuts should be used and washers can be used to get the initial offset between stator and rotor. If two nuts are interlocked (tightened) even with a washer between they will not come apart by themselves many more are just that much better. I used the normal thickness of the nuts to give me the spacing. Addding a locking agent to each nut on the rotor shaft gives just that much more saefety although I have had no problems. There should be some photos here of the POW regen in my albumn. That is for a conventional variable. A slider type can also be easily made with some hardwood and two plates of flat metal with ends cut on a slope. the slope cut ends go to the same side so the capacitiy rises slowlly and smoothly as the moveable plate is slid over the fixed plate. Just two ways to do it.
donVe3LYX

27711. Re: [regenrx] WTB A book on Regens

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-10 22:34:31 UTC
From: john ruccolo
Topic: 27696 Message: 27711

Excellent idea! It's nice to know Bruce's site is still up.

Keep in mind that the book is not "all about" Regens. It's got lots of great stories about his teenage years as a radio enthusiast/ham, his WW2 experience, and his long career in radio/TV sales and servicing.

The book ends with detailed plans for Bruce's Ultimate Regen. (Which I have not yet built).

This was just FYI. It's a great book and very highly recommended, but if you're expecting a book entirely devoted to various Regen projects, you may be disappointed.

Regards,

John

Sent from my CRM-114

> On Feb 10, 2017, at 3:36 PM, Billy Watson aesops.tech@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
> you can contact Bruce's family here : http://nr5q.com/?page_id=497
>
>> On Thu, Feb 9, 2017 at 10:02 PM, William Wood ke9xq@charter.net [regenrx] <regenrx@yahoogroups.com> wrote:
>> Just posted this in a sister
>> group, and hoping maybe posting it
>> here might bring some results.
>> Thanks Guys
>> Bill
>>
>> >>> Clip
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>>
>> Greetings Electron Benders
>> Been looking for a book that is out
>> of print. It’s Surviving Technology by
>> Bruce Vaughn NR5Q. Tried Amazon,
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>> Tried Electronic Radio and I can’t seem
>> to find a copy.
>> I would like to beg borrow buy or steal
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>> as I know is to get the most out of a regen.
>> Thanks for the Bandwidth Guys
>> 73 fer now
>> Bill KE9XQ
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>> "In the interest of Regenerating radio's lost art of Regeneration"
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>> Yahoo Groups Links
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27712. Re: [regenrx] Variable Capacitors / Condenser

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-10 22:46:04 UTC
From: Jim Scott
Topic: 27678 Message: 27712

Yes,

Galena, also called lead glance, is the natural mineral form of lead sulfide. It is crystalline and shiny. Pretty to look at, and used in early radios. If you have an Alfred Morgan "The Boy Electrician" or an early Boy Scout Wolf book, galena is used for the detector in the crystal set.

73
JIM

-----Original Message-----
From: Cecil Bayona cecil.bayona@... [regenrx] [mailto:regenrx@yahoogroups.com]
Sent: Friday, February 10, 2017 09:19 AM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Variable Capacitors / Condenser

27713. Re: [regenrx] WTB A book on Regens

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-11 00:00:22 UTC
From: Rob
Topic: 27696 Message: 27713

This is the response I got :

That book was self-published by Bruce, and after he passed away we sold
out, sorry.

73,
Ray Osterwald, NØDMS
Electric Radio Magazine
Ray@...
720-924-0171

On 02/09/2017 11:33 PM, Cecil Bayona cecil.bayona@... [regenrx] wrote:
>
> Try contacting the editor at this publication, they were suppose to sell
> it but I don't see it listed. However the title is "Every Blade of Grass".
>
> Sorry I forgot the link;
> < https://www.ermag.com/ >
>
> On 2/9/2017 10:02 PM, William Wood ke9xq@... [regenrx] wrote:
> > Just posted this in a sister
> > group, and hoping maybe posting it
> > here might bring some results.
> > Thanks Guys
> > Bill
> >
> >>>> Clip
> >
> >
> > Greetings Electron Benders
> > Been looking for a book that is out
> > of print. It’s Surviving Technology by
> > Bruce Vaughn NR5Q. Tried Amazon,
> > Ebay and the Inter-library loans and no go.
> > Tried Electronic Radio and I can’t seem
> > to find a copy.
> > I would like to beg borrow buy or steal
> > a copy of this book. It’s main point as far
> > as I know is to get the most out of a regen.
> > Thanks for the Bandwidth Guys
> > 73 fer now
> > Bill KE9XQ
> >
> >
> > ------------------------------------
> >

> > ------------------------------------
> >
> > "In the interest of Regenerating radio's lost art of Regeneration"
> > ------------------------------------
> >
>
> --
> Cecil - k5nwa
> http://thepartsplace.k5nwa.com/
>
>

27714. Surviving Technology book by Bruce Vaughn found

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-11 00:14:23 UTC
From: William Wood
Topic: 27714 Message: 27714

REALLY appreciate
everyone’s input on getting the
book and it’s contents. Sounds like
a great book all around. I did not try
his family, but I did try Amazon, and
was surprised someone found a copy
there, as I looked more then once with
different search properties. Tried Ebay,
Abe’s and Electric Radio and no go, my
posts here and a sister group led me to
a kind gent that sold it to me and should
mail it out to me probably Monday sometime.
Thanks Steve WD8DAS :) REALLY
appreciate this! :)

Again thanks to all replies both on list here
and off, much appreciated :)

73 fer now
Bill KE9XQ

27715. Re: [regenrx] WTB A book on Regens

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-11 00:14:16 UTC
From: Billy Watson
Topic: 27696 Message: 27715

I just loved reading thru his entire site. one of his pic's was dated 1965.
I was 12 yrs old. ... did you check out bookfinder. there's one there
for 58.00 on amazon. ...
http://www.bookfinder.com/search/?ac=sl&st=sl&ref=bf_s2_
a1_t1_1&qi=xTXttU924fZgD3F4N.uCLSTZ4Q0_1453081637_1:107:
708&bq=author%3Dnr5q%2520bruce%2520vaughan%26title%
3Dsurviving%2520technology

On Fri, Feb 10, 2017 at 6:00 PM, Rob roomberg@... [regenrx] <
regenrx@yahoogroups.com> wrote:

>
>
> This is the response I got :
>
> That book was self-published by Bruce, and after he passed away we sold
> out, sorry.
>
> 73,
> Ray Osterwald, NØDMS
> Electric Radio Magazine
> Ray@ERmag.com
> 720-924-0171 <(720)%20924-0171>
>
>
> On 02/09/2017 11:33 PM, Cecil Bayona cecil.bayona@... [regenrx]
> wrote:
>
>
>
> Try contacting the editor at this publication, they were suppose to sell
> it but I don't see it listed. However the title is "Every Blade of Grass".
>
> Sorry I forgot the link;
> < https://www.ermag.com/ > <https://www.ermag.com/>
>
> On 2/9/2017 10:02 PM, William Wood ke9xq@... [regenrx] wrote:
> > Just posted this in a sister
> > group, and hoping maybe posting it
> > here might bring some results.
> > Thanks Guys
> > Bill
> >
> >>>> Clip
> >

> >
> > Greetings Electron Benders
> > Been looking for a book that is out
> > of print. It’s Surviving Technology by
> > Bruce Vaughn NR5Q. Tried Amazon,
> > Ebay and the Inter-library loans and no go.
> > Tried Electronic Radio and I can’t seem
> > to find a copy.
> > I would like to beg borrow buy or steal
> > a copy of this book. It’s main point as far
> > as I know is to get the most out of a regen.
> > Thanks for the Bandwidth Guys
> > 73 fer now
> > Bill KE9XQ
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> >
> > ------------------------------------
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> > ------------------------------------
> >
> > "In the interest of Regenerating radio's lost art of Regeneration"
> > ------------------------------------
> >
>
> --
> Cecil - k5nwa
> http://thepartsplace.k5nwa.com/
>
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27716. Re: [regenrx] WTB A book on Regens

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-11 00:42:51 UTC
From: Rob
Topic: 27696 Message: 27716

Its not for sale... none in AMAZON stock... none for any price..not even $58

On 02/10/2017 07:14 PM, Billy Watson aesops.tech@... [regenrx] wrote:
> I just loved reading thru his entire site. one of his pic's was dated
> 1965. I was 12 yrs old. ... did you check out bookfinder. there's
> one there for 58.00 on amazon. ...
> http://www.bookfinder.com/search/?ac=sl&st=sl&ref=bf_s2_a1_t1_1&qi=xTXttU924fZgD3F4N.uCL
STZ4Q0_1453081637_1:107:708&bq=author%3Dnr5q%2520bruce%2520vaughan%26title%3Dsurviving%252
0technology
> <http://www.bookfinder.com/search/?ac=sl&st=sl&ref=bf_s2_a1_t1_1&qi=xTXttU924fZgD3F4N.uC
LSTZ4Q0_1453081637_1:107:708&bq=author%3Dnr5q%2520bruce%2520vaughan%26title%3Dsurviving%25
20technology>
>
>
> On Fri, Feb 10, 2017 at 6:00 PM, Rob roomberg@...
> <mailto:roomberg@...> [regenrx] <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>> wrote:
>
> This is the response I got :
>
> That book was self-published by Bruce, and after he passed away we
> sold out, sorry.
>
> 73,
> Ray Osterwald, NØDMS
> Electric Radio Magazine
> Ray@... <mailto:Ray@...>
> 720-924-0171 <tel:%28720%29%20924-0171>
>
>
> On 02/09/2017 11:33 PM, Cecil Bayona cecil.bayona@...
> <mailto:cecil.bayona@...> [regenrx] wrote:
>>
>> Try contacting the editor at this publication, they were suppose
>> to sell
>> it but I don't see it listed. However the title is "Every Blade
>> of Grass".
>>
>> Sorry I forgot the link;
>> < https://www.ermag.com/ > <https://www.ermag.com/>
>>
>> On 2/9/2017 10:02 PM, William Wood ke9xq@...
>> <mailto:ke9xq@...> [regenrx] wrote:
>> > Just posted this in a sister
>> > group, and hoping maybe posting it

>> > here might bring some results.
>> > Thanks Guys
>> > Bill
>> >
>> >>>> Clip
>> >
>> >
>> > Greetings Electron Benders
>> > Been looking for a book that is out
>> > of print. It’s Surviving Technology by
>> > Bruce Vaughn NR5Q. Tried Amazon,
>> > Ebay and the Inter-library loans and no go.
>> > Tried Electronic Radio and I can’t seem
>> > to find a copy.
>> > I would like to beg borrow buy or steal
>> > a copy of this book. It’s main point as far
>> > as I know is to get the most out of a regen.
>> > Thanks for the Bandwidth Guys
>> > 73 fer now
>> > Bill KE9XQ
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>> > "In the interest of Regenerating radio's lost art of Regeneration"
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>>
>> --
>> Cecil - k5nwa
>> http://thepartsplace.k5nwa.com/ <http://thepartsplace.k5nwa.com/>
>>
>
>
>

27717. Re: [regenrx] WTB A book on Regens

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-11 01:05:49 UTC
From: Billy Watson
Topic: 27696 Message: 27717

yes I see, I'll keep trying every now and then on e bay, and maybe
someone will run across an estate sale, and one will pop up. I' ll keep
an eye out, if one pops up, I'll let you know. on this group

On Fri, Feb 10, 2017 at 6:42 PM, Rob roomberg@... [regenrx] <
regenrx@yahoogroups.com> wrote:

>
>
> Its not for sale... none in AMAZON stock... none for any price..not even
> $58
>
>
> On 02/10/2017 07:14 PM, Billy Watson aesops.tech@gmail.com [regenrx]
> wrote:
>
>
> I just loved reading thru his entire site. one of his pic's was dated
> 1965. I was 12 yrs old. ... did you check out bookfinder. there's one
> there for 58.00 on amazon. ...
> http://www.bookfinder.com/search/?ac=sl&st=sl&ref=bf_s2_a1_
> t1_1&qi=xTXttU924fZgD3F4N.uCLSTZ4Q0_1453081637_1:107:708&bq=
> author%3Dnr5q%2520bruce%2520vaughan%26title%3Dsurviving%2520technology
>
> On Fri, Feb 10, 2017 at 6:00 PM, Rob roomberg@... [regenrx] <
> regenrx@yahoogroups.com> wrote:
>
>>
>>
>> This is the response I got :
>>
>> That book was self-published by Bruce, and after he passed away we sold
>> out, sorry.
>>
>> 73,
>> Ray Osterwald, NØDMS
>> Electric Radio Magazine
>> Ray@...
>> 720-924-0171 <%28720%29%20924-0171>
>>
>>
>> On 02/09/2017 11:33 PM, Cecil Bayona <cecil.bayona@...>
>> cecil.bayona@... [regenrx] wrote:
>>
>>

>>
>> Try contacting the editor at this publication, they were suppose to sell
>> it but I don't see it listed. However the title is "Every Blade of Grass".
>>
>> Sorry I forgot the link;
>> < https://www.ermag.com/ > <https://www.ermag.com/>
>>
>> On 2/9/2017 10:02 PM, William Wood <ke9xq@...t>ke9xq@...
>> [regenrx] wrote:
>> > Just posted this in a sister
>> > group, and hoping maybe posting it
>> > here might bring some results.
>> > Thanks Guys
>> > Bill
>> >
>> >>>> Clip
>> >
>> >
>> > Greetings Electron Benders
>> > Been looking for a book that is out
>> > of print. It’s Surviving Technology by
>> > Bruce Vaughn NR5Q. Tried Amazon,
>> > Ebay and the Inter-library loans and no go.
>> > Tried Electronic Radio and I can’t seem
>> > to find a copy.
>> > I would like to beg borrow buy or steal
>> > a copy of this book. It’s main point as far
>> > as I know is to get the most out of a regen.
>> > Thanks for the Bandwidth Guys
>> > 73 fer now
>> > Bill KE9XQ
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>>
>> --
>> Cecil - k5nwa
>> http://thepartsplace.k5nwa.com/
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27718. From WWNY TV Watertown, NY - Clarkson Professor creates new kind of battery

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-10 23:58:10 UTC
From: James W. Hodgson
Topic: 27718 Message: 27718

http://www.wwnytv.com/story/34477870/clarkson-professor-creates-new-kind-of-battery

27719. Re: [regenrx] Surviving Technology book by Bruce Vaughn found

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-11 02:13:37 UTC
From: john ruccolo
Topic: 27714 Message: 27719

Excellent! Glad to hear! You'll really like it!

73,

John KC2UAK

Sent from my CRM-114

> On Feb 10, 2017, at 7:14 PM, William Wood ke9xq@...t [regenrx] <regenrx@yahoogroups.com> wrote:
>
> REALLY appreciate
> everyone’s input on getting the
> book and it’s contents. Sounds like
> a great book all around. I did not try
> his family, but I did try Amazon, and
> was surprised someone found a copy
> there, as I looked more then once with
> different search properties. Tried Ebay,
> Abe’s and Electric Radio and no go, my
> posts here and a sister group led me to
> a kind gent that sold it to me and should
> mail it out to me probably Monday sometime.
> Thanks Steve WD8DAS :) REALLY
> appreciate this! :)
>
> Again thanks to all replies both on list here
> and off, much appreciated :)
>
> 73 fer now
> Bill KE9XQ
>
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>
> "In the interest of Regenerating radio's lost art of Regeneration"
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>
> Yahoo Groups Links
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27720. Re: [regenrx] Surviving Technology book by Bruce Vaughn found

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-11 03:42:54 UTC
From: Kirk Kleinschmidt
Topic: 27714 Message: 27720

I have some letters that Bruce exchanged with me from the early '90s that had several of his regen designs and a bunch of charming personal quotes, etc. In my QST days I edited several of Bruce's articles, and he sort of "befriended" me in "wise elder counsels upstart whipper-snapper" sort of way. :)
(I haven't yet built Bruce's Ultimate Regen, but I did build a nifty one from the 1929 Handbook with much help and encouragement from Dave, W9VES.)
When I find Bruce's stuff (just moved), I will share them with anyone who's interested. He was a real class act.
Also, if someone can put me in touch with the copyright holder, be it Bruce' estate or the last-known publisher, I'd be happy to republish the book in Kindle, Createspace and/or Lulu formats.
I'm doing that stuff for a revised edition of Stealth Amateur Radio anyway...so what's one more? Especially one that's essentially "camera ready?"
I have been thinking about republishing certain out of print radio books (with contracts, permissions, copyrights, etc), so if you know of other niche candidates, please let me know.
Thanks, and 73,
Kirk, NT0ZRochester, MN
My book, "Stealth Amateur Radio," is now available from www.stealthamateur.com and on the Amazon Kindle (soon)

On Friday, February 10, 2017 8:15 PM, "john ruccolo jr6v6gt@... [regenrx]" <regenrx@yahoogroups.com> wrote:

  Excellent! Glad to hear! You'll really like it!

73,

John KC2UAK

Sent from my CRM-114

> On Feb 10, 2017, at 7:14 PM, William Wood ke9xq@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
> REALLY appreciate
> everyone’s input on getting the
> book and it’s contents. Sounds like
> a great book all around. I did not try
> his family, but I did try Amazon, and
> was surprised someone found a copy
> there, as I looked more then once with
> different search properties. Tried Ebay,
> Abe’s and Electric Radio and no go, my
> posts here and a sister group led me to
> a kind gent that sold it to me and should

> mail it out to me probably Monday sometime.
> Thanks Steve WD8DAS :) REALLY
> appreciate this! :)
>
> Again thanks to all replies both on list here
> and off, much appreciated :)
>
> 73 fer now
> Bill KE9XQ
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> "In the interest of Regenerating radio's lost art of Regeneration"
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>
> Yahoo Groups Links
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>

27721. Re: [regenrx] Variable Capacitors / Condenser

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-11 04:28:21 UTC
From: Leonard Meek
Topic: 27678 Message: 27721

Galena can be made by melting good lead and adding a small amount of sulphur as it cools. You have to experiment to find the right amount.

Leonard
----- Original Message -----
From: 'Jim Scott' jim.scott@scottelectronic.com [regenrx]
To: regenrx@yahoogroups.com
Sent: Friday, February 10, 2017 12:46 PM
Subject: Re: [regenrx] Variable Capacitors / Condenser

Yes,

Galena, also called lead glance, is the natural mineral form of lead sulfide. It is crystalline and shiny. Pretty to look at, and used in early radios. If you have an Alfred Morgan "The Boy Electrician" or an early Boy Scout Wolf book, galena is used for the detector in the crystal set.

73
JIM

-----Original Message-----
From: Cecil Bayona cecil.bayona@... [regenrx] [mailto:regenrx@yahoogroups.com]
Sent: Friday, February 10, 2017 09:19 AM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Variable Capacitors / Condenser

27722. Re: [regenrx] Variable Capacitors / Condenser

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-11 04:48:52 UTC
From: Leonard Meek
Topic: 27678 Message: 27722

I don't know what happened to my comments, but you can make galena by adding a small amount of sulphur to molten lead.

Leonard

----- Original Message -----
From: 'Leonard Meek' lemeek@... [regenrx]
To: regenrx@yahoogroups.com
Sent: Friday, February 10, 2017 6:28 PM
Subject: Re: [regenrx] Variable Capacitors / Condenser

☐

Yes,

Galena, also called lead glance, is the natural mineral form of lead sulfide. It is crystalline and shiny. Pretty to look at, and used in early radios. If you have an Alfred Morgan "The Boy Electrician" or an early Boy Scout Wolf book, galena is used for the detector in the crystal set.

73
JIM

-----Original Message-----
From: Cecil Bayona cecil.bayona@... [regenrx] [mailto:regenrx@yahoogroups.com]
Sent: Friday, February 10, 2017 09:19 AM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Variable Capacitors / Condenser

27723. Re: [regenrx] Variable Capacitors / Condenser

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-11 05:12:47 UTC
From: J Ed
Topic: 27678 Message: 27723

Some crystal radio experimenters have reported success with chalcopyrite, regular pyrite pieces, and even rusted razor blades. Pyrite is far easier to find than putting effort into melting lead and adding sulfur.

Ed AE7TE

On Fri, Feb 10, 2017 at 8:48 PM, 'Leonard Meek' lemeek@... [regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> ☐
> I don't know what happened to my comments, but you can make galena by
> adding a small amount of sulphur to molten lead.
>
> Leonard
>
>
> ----- Original Message -----
> *From:* 'Leonard Meek' lemeek@... [regenrx]
> <lemeek@hawaiiantel.net+[regenrx]>
> *To:* regenrx@yahoogroups.com
> *Sent:* Friday, February 10, 2017 6:28 PM
> *Subject:* Re: [regenrx] Variable Capacitors / Condenser
>
> ☐ Yes,
>
> Galena, also called lead glance, is the natural mineral form of lead
> sulfide. It is crystalline and shiny. Pretty to look at, and used in
> early radios. If you have an Alfred Morgan "The Boy Electrician" or an
> early Boy Scout Wolf book, galena is used for the detector in the crystal
> set.
>
> 73
> JIM
>
> -----Original Message-----
> *From:* Cecil Bayona cecil.bayona@... [regenrx] [mailto:
> regenrx@yahoogroups.com]
> *Sent:* Friday, February 10, 2017 09:19 AM
> *To:* regenrx@yahoogroups.com
> *Subject:* Re: [regenrx] Variable Capacitors / Condenser
>
> If they have Galena then they have lead deposits also, Galena is made from
> lead. On 2/10/2017 9:14 AM, 'Jim Scott' jim.scott@...

> [regenrx] wrote: > > > I live in Joplin Missouri, USA and in the late
> 1800's, both Lead and > Zinc were discovered here. The last mines shut down
> around 1970. It > was labeled as the Tri-State Lead and Zinc mining area,
> and I was told > that it had the distinction of being the 3rd largest
> supplier in the > world in the early 1900's. > > Anyway, the mineral museum
> has small chunks of "galena" mined from > around here available. I have
> been able to harvest some small pieces > from old tailing piles. > > I have
> some here. > > 73, > > Jim Scott > WB0IYC > Life Member ARRL > FISTS 15327
> > Joplin, MO EM27RC > http://www.wb0iyc.com > > > > The whole universe is
> waiting... > http://www.jpl.nasa.gov/ > > > > -----Original Message-----
> > *From:* davesmith1@... [regenrx] > [mailto:
> regenrx@yahoogroups.com] > *Sent:* Friday, February 10, 2017 08:09 AM >
> *To:* regenrx@yahoogroups.com > *Subject:* Re: [regenrx] Variable
> Capacitors / Condenser > > Jim Scott > like web site it does have the
> galena detector rook and formulas > that help too > This will be helpful
> not having find some of parts > > I am wanting to build almost all the
> parts in my shop do have on the > shelf Variable cap and 1N34A > > Thank
> you > Dave > > > > > > ----------
> ---------- > Posted by: "Jim Scott" --
> Cecil - k5nwa http://thepartsplace.k5nwa.com/
> ---------- Posted by: Cecil Bayona
> ---------- "In the interest of Regenerating
> radio's lost art of Regeneration" ----------
>
>
>

27724. RE: [Milsurplus] Smart People: BC-9A Opinions Needed

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-11 05:56:18 UTC
From: Hubert Miller
Topic: 27614 Message: 27724

I printed out the partial manual pages. The earlier version did not use the plate dropping resistor. When keying the transmitter "on", the key grounds the B-.
For receive, you have to close the key. The key also has a "third leg" to short the headphone to ground, to limit audio pop when keying. The bias control was to crank the oscillator level down to minimum for receiving, or up to 8-9 mA for max range, apparently. So with this version, SCR-77-A, you have no frequency offset at the price of problems with nearby sets maybe overriding weak signals.

There are no clues about operating the version Dave has. The netting procedure solely consists of calibrating the receivers of sets to one set defined as the master set, done at one setting. If the other channels of your outstation set do no line up with what the master station defines as the channel number, you are to mark on pencil on the dial the actual point where that defined channel is to be found.

I suppose with the later BC-9 you could maybe "calibrate" the set by marking with pencil the setting for transmit frequency. Think so?
-Hue

-----Original Message-----
From: Milsurplus [mailto:milsurplus-bounces@...] On Behalf Of David Stinson
Sent: Tuesday, January 3, 2017 6:55 PM

Subject: Re: [Milsurplus] Smart People: BC-9A Opinions Needed

With many thanks to our members, I've received the correct BC-9A schematic (Thanks Dave Hollander):
https://goo.gl/photos/QAiuWy7SsmxbEGmL8

A detailed technical PDF (Thanks Ray Chase):
https://drive.google.com/file/d/0B1zXYo8XYQS8c24yVGViMWM3cFk/view?usp=sharing

And other excellent information from other members.
Our people are the best.
Looking forward to the process of reviving this century-old-warrior.

It really intrigues me to know that when this radio was in use by the 3rd Battalion of the 12th Infantry Regiment, thousands of veterans of The War for Southern Independence were still living.

GL OM ES 73 DE Dave AB5S

27725. Re: [regenrx] Variable Capacitors / Condenser

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-11 13:36:46 UTC
From: davesmith1@...
Topic: 27678 Message: 27725

Thank did know just add Sulphur to lead
I have lead and Home Depot has Sulphur

Dave

27726. Re: [regenrx] Variable Capacitors / Condenser

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-11 13:46:24 UTC
From: davesmith1@...
Topic: 27678 Message: 27726

Has any ever try carbide or tungsten carbide
https://en.wikipedia.org/wiki/Tungsten_carbide for a detector

Dave

27727. Re: [regenrx] Variable Capacitors / Condenser

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-11 15:17:44 UTC
From: Brian Ford
Topic: 27678 Message: 27727

blockquote, div.yahoo_quoted { margin-left: 0 !important; border-left:1px #715FFA solid !important; padding-left:1ex !important; background-color:white !important; } Yes one can do that, a well ventilated area is needed.
Keith

Sent from Yahoo Mail for iPad

On Friday, February 10, 2017, 22:48, 'Leonard Meek' lemeek@... [regenrx] <regenrx@yahoogroups.com> wrote:

☐
I don't know what happened to my comments, but you can make galena by adding a small amount of sulphur to molten lead. Leonard
----- Original Message ----- From: 'Leonard Meek' lemeek@... [regenrx] To: regenrx@yahoogroups.com Sent: Friday, February 10, 2017 6:28 PM Subject: Re: [regenrx] Variable Capacitors / Condenser
☐ Yes,

Galena, also called lead glance, is the natural mineral form of lead sulfide. It is crystalline and shiny. Pretty to look at, and used in early radios. If you have an Alfred Morgan "The Boy Electrician" or an early Boy Scout Wolf book, galena is used for the detector in the crystal set.

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JIM

-----Original Message-----
From: Cecil Bayona cecil.bayona@... [regenrx] [mailto:regenrx@yahoogroups.com]
Sent: Friday, February 10, 2017 09:19 AM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Variable Capacitors / Condenser

-- #ygrp-mkp {border:1px solid #d8d8d8;font-family:Arial;margin:10px 0;padding:0 10px;}#ygrp-mkp hr {border:1px solid #d8d8d8;}#ygrp-mkp #hd {color:#628c2a;font-size:85%;font-weight:700;line-height:122%;margin:10px 0;}#ygrp-mkp #ads {margin-bottom:10px;}#ygrp-mkp .ad {padding:0 0;}#ygrp-mkp .ad p {margin:0;}#ygrp-mkp .ad a {color:#0000ff;text-decoration:none;}#ygrp-sponsor #ygrp-lc {font-family:Arial;}#ygrp-sponsor #ygrp-lc #hd {margin:10px 0px;font-weight:700;font-size:78%;line-height:122%;}#ygrp-sponsor #ygrp-lc .ad {margin-bottom:10px;padding:0 0;}#actions {font-family:Verdana;font-size:11px;padding:10px 0;}#activity {background-color:#e0ecee;float:left;font-family:Verdana;font-size:10px;padding:10px;}#activity span {font-weight:700;}#activity span:first-child {text-transform:uppercase;}#activity span a {color:#5085b6;text-decoration:none;}#activity span span {color:#ff7900;}#activity span .underline {text-decoration:underline;}.attach {clear:both;display:table;font-family:Arial;font-size:12px;padding:10px 0;width:400px;}.attach div a {text-decoration:none;}.attach img {border:none;padding-right:5px;}.attach label {display:block;margin-bottom:5px;}.attach

label a {text-decoration:none;}blockquote {margin:0 0 0 4px;}.bold {font-family:Arial;font-size:13px;font-weight:700;}.bold a {text-decoration:none;}dd.last p a {font-family:Verdana;font-weight:700;}dd.last p span {margin-right:10px;font-family:Verdana;font-weight:700;}dd.last p span.yshortcuts {margin-right:0;}div.attach-table div div a {text-decoration:none;}div.attach-table {width:400px;}div.file-title a, div.file-title a:active, div.file-title a:hover, div.file-title a:visited {text-decoration:none;}div.photo-title a, div.photo-title a:active, div.photo-title a:hover, div.photo-title a:visited {text-decoration:none;}div#ygrp-mlmsg #ygrp-msg p a span.yshortcuts {font-family:Verdana;font-size:10px;font-weight:normal;}.green {color:#628c2a;}.MsoNormal {margin:0 0 0 0;}o {font-size:0;}#photos div {float:left;width:72px;}#photos div div {border:1px solid #666666;height:62px;overflow:hidden;width:62px;}#photos div label {color:#666666;font-size:10px;overflow:hidden;text-align:center;white-space:nowrap;width:64px;}#reco-category {font-size:77%;}#reco-desc {font-size:77%;}.replbq {margin:4px;}#ygrp-actbar div a:first-child {margin-right:2px;padding-right:5px;}#ygrp-mlmsg {font-size:13px;font-family:Arial, helvetica, clean, sans-serif;}#ygrp-mlmsg table {font-size:inherit;font:100%;}#ygrp-mlmsg select, input, textarea {font:99% Arial, Helvetica, clean, sans-serif;}#ygrp-mlmsg pre, code {font:115% monospace;}#ygrp-mlmsg * {line-height:1.22em;}#ygrp-mlmsg #logo {padding-bottom:10px;}#ygrp-msg p a {font-family:Verdana;}#ygrp-msg p#attach-count span {color:#1E66AE;font-weight:700;}#ygrp-reco #reco-head {color:#ff7900;font-weight:700;}#ygrp-reco {margin-bottom:20px;padding:0px;}#ygrp-sponsor #ov li a {font-size:130%;text-decoration:none;}#ygrp-sponsor #ov li {font-size:77%;list-style-type:square;padding:6px 0;}#ygrp-sponsor #ov ul {margin:0;padding:0 0 0 8px;}#ygrp-text {font-family:Georgia;}#ygrp-text p {margin:0 0 1em 0;}#ygrp-text tt {font-size:120%;}#ygrp-vital ul li:last-child {border-right:none !important;}

27728. Crystal Radio Circuits/Schematics Best one to use

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-11 17:24:06 UTC
From: davesmith1@...
Topic: 27728 Message: 27728

What is a good Crystal Radio Circuits/Schematics
Using either a tuning coil or a Variable Capacitors / Condenser

Dave

27729. Re: [regenrx] $20 Or Less

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-11 17:33:10 UTC
From: Jim Hill
Topic: 2278 Message: 27729

I tried the link, but Yahoo says there is no group with that name.

At 01:22 AM 3/11/2006, Robert Nicholas wrote:
>Items posted are to be sold for $20 or less. Items can be new, used,
>manufactured or hand crafted but must be in sellable condition.
>
>
>This group was created to provide its members with a safe forum to sell
>and request merchandise. It is FREE to join and FREE to post.
>
><http://groups.yahoo.com/group/Buyitfor20orless_Illinois/>http://groups.yahoo.com/group/Buyitfor20orless_Illinois/

27730. Re: Crystal Radio Circuits/Schematics Best one to use

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-11 18:38:32 UTC
From: mikhail-vulkov@...
Topic: 27728 Message: 27730
Attachments: 1 described; binary payloads are missing from this source WARC

Here is a vintage amplifier for regeneration of antenna signal. Search my previous post for other wiring.

27731. Re: [regenrx] Re: Crystal Radio Circuits/Schematics Best one to use

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-11 19:04:12 UTC
From: msalbert@...
Topic: 27728 Message: 27731

If you want to analyze and optimize crystal radio performance, here is one resource
http://www.bentongue.com/xtalset/xtalset.html

Regards,
Mark KB9VKE

27732. Re: [regenrx] Re: Crystal Radio Circuits/Schematics Best one to use

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-11 19:08:52 UTC
From: Rajaram Bhat
Topic: 27728 Message: 27732

One of the best resources is Dave Schmarder’s site: http://makearadio.com

Rajaram

On Feb 11, 2017, at 2:04 PM, msalbert@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
>
> If you want to analyze and optimize crystal radio performance, here is one resource
> http://www.bentongue.com/xtalset/xtalset.html
<http://www.bentongue.com/xtalset/xtalset.html>
>
> Regards,
> Mark KB9VKE
>
>
>
>

27733. Re: [regenrx] Re: Crystal Radio Circuits/Schematics Best one to use

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-12 03:13:31 UTC
From: davesmith1@...
Topic: 27728 Message: 27733

Thank you for info
But which one /Schematics work good or bad???
Is some better that others???

Dave

27734. Re: [regenrx] Re: Crystal Radio Circuits/Schematics Best one to use

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-12 04:20:12 UTC
From: mihail dutchevici
Topic: 27728 Message: 27734

On Sat, 2/11/17, davesmith1@sbcglobal.net [regenrx] <regenrx@yahoogroups.com> wrote:

Subject: Re: [regenrx] Re: Crystal Radio Circuits/Schematics Best one to use
To: regenrx@yahoogroups.com
Date: Saturday, February 11, 2017, 10:13 PM

Crystal radio works on the energy from the antenna. More complicated circuit LESS energy

Thank you for infoBut which one
/Schematics work good or bad???Is some better
that others???
Dave

27735. Re: [regenrx] Re: Crystal Radio Circuits/Schematics Best one to use

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-12 12:03:48 UTC
From: dulmagedon@...
Topic: 27728 Message: 27735

The simple basic tank circuit with earphones and a cap and one diode in the loop works well everytime. Occasionally variations appear to work better but more and more I think it is in ones mind as one finds they keep going back to that old reliable design. You will have to decide for yourself. Built a normal circuit and then go nuts with one. If you find yourself reaching for the normal one more then knot you will know you came to the same concluson as I did. There is a lot to be said for easy to build , always works well designs.
donVe3LYX

27736. Re: [regenrx] Re: Crystal Radio Circuits/Schematics Best one to use

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-12 14:29:45 UTC
From: Rob
Topic: 27728 Message: 27736

I certainly did battle with this question and concluded the very same
thing as Don.
Pictures here:
http://www.learnmorsecode.com/help/xtal1.html

On 02/12/2017 07:03 AM, dulmagedon@... [regenrx] wrote:
>
> The simple basic tank circuit with earphones and a cap and one diode
> in the loop works well everytime. Occasionally variations appear to
> work better but more and more I think it is in ones mind as one finds
> they keep going back to that old reliable design. You will have to
> decide for yourself. Built a normal circuit and then go nuts with one.
> If you find yourself reaching for the normal one more then knot you
> will know you came to the same concluson as I did. There is a lot to
> be said for easy to build , always works well designs.
> donVe3LYX
>
>
> --
>

27737. Re: [regenrx] Re: Crystal Radio Circuits/Schematics Best one to use

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-12 16:13:45 UTC
From: msalbert@...
Topic: 27728 Message: 27737

Certainly you will hear stations with this approach. But the question was "best". What's best for one person may not be best for another, do you mean highest performance, or simplest design, or all homemade parts? Do you want to equally accommodate differing antennas, grounds, and headsets? So Coupling the antenna to the tank with a separate coil, Or tapping the antenna or detector up or down on the tank might produce louder signals. How about one of the Alfred Morgan double slider tank coil sets, maybe one for the antenna and one for the detector… or adding an S-meter… all passive Fun! There's lots of possibilities for experimentation, so have a look at the various designs out there and you'll have plenty of ideas to try! One of the Midnight science Crystal set society books is good starting point. Good luck, let us know how it goes! Regards, Mark -----Original Message----- From: Rob roomberg@... [regenrx] To: regenrx Sent: Sun, Feb 12, 2017 08:29 AM Subject: Re: [regenrx] Re: Crystal Radio Circuits/Schematics Best one to use

I certainly did battle with this question and concluded the very same thing as Don. Pictures here: http://www.learnmorsecode.com/help/xtal1.html
On 02/12/2017 07:03 AM, dulmagedon@... [regenrx] wrote:

The simple basic tank circuit with earphones and a cap and one diode in the loop works well everytime. Occasionally variations appear to work better but more and more I think it is in ones mind as one finds they keep going back to that old reliable design. You will have to decide for yourself. Built a normal circuit and then go nuts with one. If you find yourself reaching for the normal one more then knot you will know you came to the same concluson as I did. There is a lot to be said for easy to build , always works well designs. donVe3LYX

27738. Re: [regenrx] Crystal Radio Circuits/Schematics Best one to use

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-12 17:26:28 UTC
From: Rajaram Bhat
Topic: 27728 Message: 27738

Almost any circuit will work if one has a good antenna and ground. The question is how well - how good is the sensitivity and selectivity. Since there is no amplification and only loss, it is important the signal power picked up is maximized (good antenna and ground) and losses minimized. All circuits beyond the very basic try to minimize loss - some more successfully than others. If you live in a metropolitan area you will likely pick up at least one station easily and it is quite possible that you will pick up several more and the problem will be tuning to only the one you are interested in. However, if you are in the boondocks like me with no powerful stations nearby, the problem will be in getting a good signal and minimizing losses as much as possible. If you select the right circuit and the right components (all air variable capacitors are not the same - ones that are silver plated, have ceramic dielectric and multiple brushes are required to minimize loss; use litz wire for the coils) and have good antenna and ground you can not only get many stations, get very good selectivity and listen to stations 500 or more miles away even when one lives in the boondocks. The ones I like are circuit #77 (http://makearadio.com/crystal/77.php), circuit # 78 (http://makearadio.com/crystal/78.php) and the loop crystal radio (http://makearadio.com/loops/loops3.php). You will also need a good pair of high impedance headphones - if "sound powered” it is even better.

Raj

> On Feb 12, 2017, at 11:13 AM, msalbert@... [regenrx] <regenrx@yahoogroups.com> wrote:
>
> Certainly you will hear stations with this approach. But the question was "best". What's best for one person may not be best for another, do you mean highest performance, or simplest design, or all homemade parts? Do you want to equally accommodate differing antennas, grounds, and headsets? So Coupling the antenna to the tank with a separate coil, Or tapping the antenna or detector up or down on the tank might produce louder signals. How about one of the Alfred Morgan double slider tank coil sets, maybe one for the antenna and one for the detector… or adding an S-meter… all passive Fun!
> There's lots of possibilities for experimentation, so have a look at the various designs out there and you'll have plenty of ideas to try! One of the Midnight science Crystal set society books is good starting point.
>
> Good luck, let us know how it goes!
> Regards, Mark
>
> -----Original Message-----
> From: Rob roomberg@...t <mailto:roomberg@...> [regenrx] <regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>>
> To: regenrx <regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>>
> Sent: Sun, Feb 12, 2017 08:29 AM
> Subject: Re: [regenrx] Re: Crystal Radio Circuits/Schematics Best one to use
>
>
>

>
> I certainly did battle with this question and concluded the very same thing as Don.
> Pictures here:
> http://www.learnmorsecode.com/help/xtal1.html
<http://www.learnmorsecode.com/help/xtal1.html>
>
>
> On 02/12/2017 07:03 AM, dulmagedon@... <mailto:dulmagedon@...> [regenrx] wrote:
>
> The simple basic tank circuit with earphones and a cap and one diode in the loop works well everytime. Occasionally variations appear to work better but more and more I think it is in ones mind as one finds they keep going back to that old reliable design. You will have to decide for yourself. Built a normal circuit and then go nuts with one. If you find yourself reaching for the normal one more then knot you will know you came to the same concluson as I did. There is a lot to be said for easy to build , always works well designs.
> donVe3LYX
>

27739. Question about Kitchin Regen from 2010 CQ Magazine

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-12 19:59:54 UTC
From: kc2siz@...
Topic: 27739 Message: 27739

I've started building Kitchin's 2010 "high-performance regen".

An article from CQ Magazine, which contains a schematic, is in the files section.

There were a few corrections made to this article after it was published. The corrections all concern the audio section. They include the value of R11 (should be 2.7ohms) and C22 (should be ceramic .1 microfarad). However, I also notice that the value of of the electrolytic cap C20, listed as "5", does not look right.

Does anyone know what the correct value should be?

Thanks,

Steve

27740. Re: Question about Kitchin Regen from 2010 CQ Magazine

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-12 21:45:14 UTC
From: kc2siz@...
Topic: 27739 Message: 27740

Oops....correction: It's C21 that should be .1 uF, C22 is an electroltic 330uF.

27741. Re: [regenrx] Crystal Radio Circuits/Schematics Best one to use

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-12 22:05:08 UTC
From: Theosleaper
Topic: 27728 Message: 27741
Attachments: 3 described; binary payloads are missing from this source WARC

The best one? Well, In the late 1950's, I had great success with the "Wave-Powered Tuner" from volume 7 of Radio-TV Experimenter" page 116. Richard Post emailed me this a few years ago. Rick, K1WYH

27742. Re: [regenrx] Crystal Radio Circuits/Schematics Best one to use

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-13 03:57:31 UTC
From: davesmith1@...
Topic: 27728 Message: 27742

Thank you all for this I will pick one and make it

Dave

27743. Re: [regenrx] Crystal Radio Circuits/Schematics Best one to use

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-13 13:19:00 UTC
From: msalbert@...
Topic: 27728 Message: 27743

Hi Dave, good luck! The antenna, ground, and headsets together are probably more important than the radio itself. Spend at least as much time at those items as the radio and I believe you will be successful. Regards, Mark -----Original Message----- From: davesmith1@... [regenrx] To: regenrx Sent: Sun, Feb 12, 2017 09:59 PM Subject: Re: [regenrx] Crystal Radio Circuits/Schematics Best one to use

Thank you all for this I will pick one and make it Dave

27744. Crystal Set Society Re: [regenrx] Best one to use

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-14 04:17:11 UTC
From: wn2ami@...
Topic: 27728 Message: 27744

Hi Dave, There is the 'Crystal Set Society' at:
<https://www.midnightscience.net/>
They have lots of information on optimizing crystal set circuits and reception.
Regards,
bob...w2ami x wn2ami 1962
Highland, NY

27745. Regen osc freq shift in tube circuit?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-15 21:15:13 UTC
From: Hubert Miller
Topic: 27745 Message: 27745

Please give me your opinion on this.
Imagine a tube oscillator (maybe even a regenerative receiver) oscillating at a minimum level, with a series
resistor in the plate dropping the B+ for regen control. At this point, B+ is 45 volts. Then imagine turning
this control pot down to minimum resistance so the circuit oscillates at the maximum and the tube has
the full 120 volts on the plate.
The frequency will shift, right?
And in what direction?
I know - impossible to quantify - but can you give an approximate figure for the frequency shift?
I know this is difficult - assume a high-C, pretty stable circuit.
thanks-
Hue

27746. Re: Regen osc freq shift in tube circuit?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-15 22:09:04 UTC
From: dulmagedon@...
Topic: 27745 Message: 27746

Again . Been there done that Yes it will shift some BUT the freq is mainly determined by the tank design. It is nothing to build a correction Cap into the circuit that is switched in and it could be on TX only for that matter. I now use though the band spread cap to cover this designing it so the cap is on freq at centre positon so I can go up or down. I have built them with one tank and also with a coil for each but same cap as well. HOWEVER. IF you go from 45 to 120 volts perhaps but if you went from 68to 90 volts which is perhaps more realisitic you will find the change very minor and of no significance. Every regen can do this as it with no modes BTW. At least any that have a well designed regen pot control which can enter oscillation or go below it with ease. The POW set does both Rx and TX simly by adding voltage. The DN-1 does it with seperate coils and the original transceiver (56/58)did it with a correcting cap. I am not making this up. have two working as we speak. Wanna listen on 40m?
donVe3LYX

27747. Re: Regen osc freq shift in tube circuit?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-16 12:23:29 UTC
From: dulmagedon@...
Topic: 27745 Message: 27747

Directly below the red spot that is beside the ARC5 is the original one I built. it was at first simply a 56 tubed hartley regen that would transmit. I switched in a pot and earphones on rx and bypassed them on tx. If it had a problem it wasn't areal powerful rig. later I added a Pa which was audio on rx and a PA on TX . This added a level of complication that took the fun out of it a bu it although the PA would affect the freq enuf to eliminate the pull. Also with a regen , if it was dead nts on the same freq as the TX you would not get the proper note so a small offset say as high as 1000cylces or one KC is easliy tolerated.
Perhaps a better way to think is can you take saya hartley self controlled osc and make it receive. (YES)
In about 1922 there was a circuit published that did both and someone sent it to me when I was exploring this same principle. I went thru all the questions and doubts as well but decided just try. It turned out not as difficult as I was led to believe. I hope you find one of build one as it is an interesting subject. To take it from iffy to workable is so easy it can be done in minutes. and by several different but excellent methods. I still have two such devices and am trying to hold back from building another after reading some of your threads.
DonVe3LYX

27748. RE: [Glowbugs] Re: Regen osc freq shift in tube circuit?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-16 21:25:31 UTC
From: Hubert Miller
Topic: 27748 Message: 27748

On another group we were discussing a 1921 Army transceiver which uses a single tube in the RF. The tube plate goes to an audio transformer and then to the 2 audio tubes, and the tube runs at around 60 volts. On transmit, a key shorts across the audio transformer winding and the B+ is boosted to 125 volts. The owner of the radio reported that on transmit the frequency dropped 14 kHz at 3700+ kHz, 80 meter band. We were all puzzled by how this could be, and how anyone could actually use the radio.
What was discovered was that - apparently – the chokes and capacitors isolating the the tuned circuit and RF tube plate from the rest of the circuit (audio transformer, dropping resistor, and plate current meter) was not totally effective, so the circuit “saw” other reactive components. Strangely enough, across the 125 volt supply, the bypass capacitor had to be carefully chosen, a value somewhere in the range of 300 pF, and this brought the receive and transmit frequencies close enough together that the set is usable. With the factory-design part, the frequency shift was about 3 kHz.
No one has yet, i think, explained why the B+ bypass must be so carefully chosen.
And just why adding capacitance here RAISES the transmit frequency.
But one fellow commented that the design had to be “empirically arrived at”, and i think we all agreed heartily with that. In this circuit, increasing the B+ bypass capacitor to what you might think was a proper or better value, made the transceiver totally unusable!
So that’s why i asked. I learned from the replies that compared to this circuit’s operation, the frequency shift due to the tube’s operating point is a minor effect !
-Hue

27749. Amazing Article

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-17 04:00:57 UTC
From: Bry Carling
Topic: 27749 Message: 27749

Checkout VE7SL Steve's great article about the NRR:

http://ve7sl.blogspot.ca/2017/02/the-2017-novice-rig-round-up.html?m=1

Best regards - Bry Carling, AF4K
117 Sterling Pine St.
Sanford, FL 32773

Tel: 321-262-5471

27750. Marconi 760 ship's regen + 763 buffer amp

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-18 08:27:19 UTC
From: Hubert Miller
Topic: 27750 Message: 27750

I was looking at the manual for the Marconi 730, a 4-valve regenerative receiver tuning 15 - 26,000 kHz, at
http://marconitype730vintagecommunicationsreceiver.itsupportsolutions.co.uk/wp-content/uploads/sites/3/2016/06/Marconi-Type-730-Marine-Communications-Receiver-Service-Manual.pdf
(and many thanks to the person who published that.)

I noticed that the receiver seems to date to 1935, with circuit drawing updates in 1940, after the U.K. was already at war.
Also particularly interesting is the 'Model 763 Buffer', an untuned RF isolation amp, which has a drawing dated 2-1941. I thought it was interesting that this accessory unit was added on much
later and well into the European war.
-H

27751. Re: Regen osc freq shift in tube circuit?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-18 18:45:15 UTC
From: dulmagedon@...
Topic: 27745 Message: 27751

In this vein I took my twin 26 regen and using a long clip lead bypassed the regen pot, earphones and plate circuit resistor. Shift was 19khz measured on my digital rx. Pretty high although 1/2 that is probably because of the 19 inch clip lead so probably 9 to 10 if I used a short one. Then I went to my 6sl7 regen which is throttle cap controlled for feedback . Surprisingly it is very easy to use a a tx with no significant freq shift. IT wouldn't be great for long distance but nearby coms would be easy. Onthe frst one I used a miniture ceramic ap in the rx tx switch to pad the tank and keep it in the ball game. I may try build another with a 201A with that intent and see what i can do when building with that in mind but with a pre 29 tube.
donVe3LYX

27752. Re: Regen osc freq shift in tube circuit?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-19 12:41:00 UTC
From: dulmagedon@...
Topic: 27745 Message: 27752

Akso your project subject Ibeleive used a loop for both antenna and tank. A big coil which has aoop is has usually a very high Q. the higher the Q the better the control . for instance in a TNT transmitter there is the dominant Q effect where the large plate tankcircuit takes control over the small low Q grid circuit despite its roll on determining gneral freq and so the larger Q is always the boss in LC circuits. A loop would have a very good Q I would think and so would be not unrealistic to think of it as large and in charge which may to some aspect limit the swing some as well.
donVE3LYX
sori for my spelling. Cant find my glasses

27753. Re: Marconi 760 ship's regen + 763 buffer amp

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-19 13:39:39 UTC
From: Paul Ross
Topic: 27750 Message: 27753

I suspect the buffer was to keep RF from getting back into the antenna for tracking purposes?

73 /Paul W3FIS

Sent from my iPad

27754. Re: Amazing Article

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-19 13:48:22 UTC
From: Bry Carling
Topic: 27749 Message: 27754

EVERYONE is invited to join the fun all this week through next Sunday on the NRR. Use ANY rig.... listen for stations calling CQ NRR or call CQ NRR.

Full details here:

http://NoviceRigRoundup.com

NOVICE RIG ROUNDUP 2017<http://novicerigroundup.com/>
novicerigroundup.com
ANNOUNCING NOVICE RIG ROUNDUP 2017!!! The dates are 0000 UTC on FEB 18 through 2359 UTC on FEB 26, 2017 - that is 9 full days (UTC.) GOOD NEWS: THIS WILL COVER two ...

From: tetrode@... <tetrode@googlegroups.com> on behalf of Bry Carling <af4k@...>
Sent: Thursday, February 16, 2017 11:00 PM
To: FLBoatanchors@yahoogroups.com
Cc: Glow Bugs; Boatanchors QTH; RegenRx Yahoo
Subject: [Glowbugs] Amazing Article

Checkout VE7SL Steve's great article about the NRR:

http://ve7sl.blogspot.ca/2017/02/the-2017-novice-rig-round-up.html?m=1

Best regards - Bry Carling, AF4K
117 Sterling Pine St.
Sanford, FL 32773

Tel: 321-262-5471

--
--
ZCZC
This is a transmission from the Glowbugs list
To unsubscribe from this group, send email to
tetrode+unsubscribe@...
For more options, visit this group at
http://groups.google.com/group/tetrode?hl=en
Google Groups<http://groups.google.com/group/tetrode?hl=en>
groups.google.com
Google Groups allows you to create and participate in online forums and email-based groups with a rich experience for community conversations.

NNNN

You received this message because you are subscribed to the Google Groups "Glowbugs" group.
To unsubscribe from this group and stop receiving emails from it, send an email to
tetrode+unsubscribe@...<mailto:tetrode+unsubscribe@...>.

For more options, visit https://groups.google.com/d/optout.

27755. Listen For HAARP In Alaska (Off Subject)

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-19 20:33:19 UTC
From: Sam Neal
Topic: 27755 Message: 27755
Attachments: 1 described; binary payloads are missing from this source WARC

Forwarded message is attached.

27756. RE: [Glowbugs] Re: Regen osc freq shift in tube circuit?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-23 23:16:56 UTC
From: dulmagedon@...
Topic: 27748 Message: 27756

Excellent and interesting There is a BC-9 in ops on the NRR this week. I have heard him onceon 80M. Neat sound. Is that a similar set or quite different?

27757. RE: [Glowbugs] Re: Regen osc freq shift in tube circuit?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-23 23:19:20 UTC
From: dulmagedon@...
Topic: 27748 Message: 27757

BTW I had my one tube Trncvr in ops today on 40M. Fun rig but could use more power I think donVE3LYX

27758. Re: Using a Darlington pair as an AM detector.

Yahoo group: regenrx (2016 — 2017)
Date: 2017-02-27 18:58:23 UTC
From: dawmast@...
Topic: 26864 Message: 27758

Here I have two schematics of detector stages. The uppermost one is an infinite impedance detector T2 which is preceded by a bootstrapped emitter follower buffer stage with T1. That buffer stage is very important when this circuit is used together with a regenerative stage (Q-Multiplier), by using a buffer stage the tank circuit sees a constant input impedance. When the detector stage T2 would be directly coupled onto the hot end of the tank circuit, impedance increases caused by going into oscillating of the Q-Multiplier stage cause nasty regeneration backlash.

In the lowermost one the buffer stage is followed by a full wave detector stage with biased diodes D1 and D2. When a connected Q-Multiplier goes into oscillating, D1 and D2 will conduct more, decreasing their input impedances which is reflected back to the base of T4. That makes regeneration control more smoothly.

In both schematics these base stopper resistors R4 and R15 are crucial, otherwise the emitter follower buffer stage will parasitically oscillate because of the intrinsic base-emitter junction capacitance and stray capacitances between emitter and ground (Colpitts topology).

https://www.uploadarchief.net/files/download/detectorblock.gif
https://www.uploadarchief.net/files/download/detectorblock.gif

27759. Solid state day in the shack

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-04 13:27:40 UTC
From: dulmagedon@...
Topic: 27759 Message: 27759

Yesterday I dragged out my hb solid state 80M station. It consists of the slugabsorb regen (slug tune fixed cap) and a version of bascially the sardine sender. I gave the regen its own battery , (inside 9 volt) The sender had quit and I had looked it over but not seriously. Eventually I found a sorted Zener that was killing the power to the osc, I made some other repairs as well. This Tx has been here so long it is starting to get some war wounds from repairs and experiments so this is probably its last chance. I manged tho to get it going although I dropped the crystal on the floor and can not yet find it. I grabbed another and had it on air for a bit late last night. I am at heart a tube man but it is good to keep practiced on the SS stuff as well. The slugabsorb
still works nicely on both SSb and Cw. A joy to run.

donVe3LYX

27760. Solid state day in the shack

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-08 01:44:19 UTC
From: Bry Carling
Topic: 27759 Message: 27760

Nice going DOn - did you make any contacts with it? Which band(s) ?

Bry AF4K

Posted by: dulmagedon@...

Yesterday I dragged out my hb solid state 80M station. It consists of the slugabsorb regen (slug tune fixed cap) and a version of bascially the sardine sender. I gave the regen its own battery , (inside 9 volt) The sender had quit and I had looked it over but not seriously. Eventually I found a sorted Zener that was killing the power to the osc, I made some other repairs as well. This Tx has been here so long it is starting to get some war wounds from repairs and experiments so this is probably its last chance. I manged tho to get it going although I dropped the crystal on the floor and can not yet find it. I grabbed another and had it on air for a bit late last night. I am at heart a tube man but it is good to keep practiced on the SS stuff as well. The slugabsorb
still works nicely on both SSb and Cw. A joy to run.

donVe3LYX

Messages in this topic (1)

"In the interest of Regenerating radio's lost art of Regeneration"

Yahoo Groups Links

Yahoo! Groups<http://groups.yahoo.com/group/regenrx/join>
groups.yahoo.com
/

(Yahoo! ID required)

27761. Re: Solid state day in the shack

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-08 20:24:55 UTC
From: dulmagedon@...
Topic: 27759 Message: 27761

As a matter of fact, No, which surprises me. It has enough power. anyway it is all fixed and working so some good day when conditions are exceptional I will retry. I need a QRP guru. When I get below 5 watts I come up empty.
donVe3LYX

27762. McMurdo Silver ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-08 23:02:05 UTC
From: Hubert Miller
Topic: 27762 Message: 27762

If anyone has seen a good biography of McMurdo Silver, i would like to know about it. From apparently high-end multiband receivers in the 1930s
to bottom-end ham gear in the 1940s, i kind of don't understand the progression of the story. I have not been able to find a decent bio on the
internet. Plenty of photos of the top-end collectible radios.
-Hue

27763. WTD SX 28A Parts & Knobs

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-08 23:21:13 UTC
From: Carl Nord WA1KPD
Topic: 27763 Message: 27763

Looking for one ferite slug for an SX 28A RF coil as well as some knobs. Anybody have a parts donor?

Carl

-----Original Message-----

From: Kargo_cult@...
To: regenrx@yahoogroups.com,tetrode@...
Cc:
Sent: 2017-03-08 6:02:14 PM
Subject: [Glowbugs] McMurdo Silver ?

If anyone has seen a good biography of McMurdo Silver, i would like to know about it. From apparently high-end multiband receivers in the 1930s

to bottom-end ham gear in the 1940s, i kind of don’t understand the progression of the story. I have not been able to find a decent bio on the

internet. Plenty of photos of the top-end collectible radios.

-Hue

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ZCZC
This is a transmission from the Glowbugs list
To unsubscribe from this group, send email to
tetrode+unsubscribe@...
For more options, visit this group at
http://groups.google.com/group/tetrode?hl=en
NNNN

You received this message because you are subscribed to the Google Groups "Glowbugs" group.
To unsubscribe from this group and stop receiving emails from it, send an email to
tetrode+unsubscribe@....
For more options, visit https://groups.google.com/d/optout.

27764. Re: McMurdo Silver ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-08 23:47:54 UTC
From: mikhail-vulkov@...
Topic: 27762 Message: 27764

Here are some data:
http://www.radiomuseum.org/dsp_hersteller_detail.cfm?company_id=2838
http://www.radiomuseum.org/dsp_hersteller_detail.cfm?company_id=2838

27765. Re: McMurdo Silver ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-09 00:27:42 UTC
From: mikhail-vulkov@...
Topic: 27762 Message: 27765

Google translation:
McMurdo Silver was born in 1903. In 1924, he founded the Silver Marshall Inc. In addition to the distribution of radio components, he already developed the first devices. After bankruptcy at the time of the Great Depression in 1933, he founded the company as McMurdo Silver Inc.. After the re-closure in 1938, McMurdo Silver, together with E.I.Guthman, developed amateur radio equipment and accessories up to the war-induced production of Guthman in 1940.
After the war, Silver founded his last company in Hartford, CT, McMurdo Silver Co., Inc., 1240 Main St., Hartford Connecticut; and produced measuring instruments and amateur radio material. In 1948 McMurdo died at the age of 45.

27766. Re: [regenrx] WTD SX 28A Parts & Knobs

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-08 23:45:01 UTC
From: Don Lewis
Topic: 27763 Message: 27766

Carl:

These guys have really cheap ‘new’ slugs, ...and shipping is cheap, too.

Surplus Sales of Nebraska
https://www.surplussales.com/Inductors/Ind-SlugTu/Ind-SlugTu-6.html

-Don

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From: Carl Nord WA1KPD chnord@... [regenrx]
Sent: Wednesday, March 08, 2017 5:21 PM
To: regenrx@yahoogroups.com ; tetrode@... ; Kargo_cult@msn.com

Subject: [regenrx] WTD SX 28A Parts & Knobs

Looking for one ferite slug for an SX 28A RF coil as well as some knobs. Anybody have a parts donor?

Carl

-----Original Message-----

From: Kargo_cult@...
To: regenrx@yahoogroups.com,tetrode@...
Cc:
Sent: 2017-03-08 6:02:14 PM
Subject: [Glowbugs] McMurdo Silver ?

If anyone has seen a good biography of McMurdo Silver, i would like to know about it. From apparently high-end multiband receivers in the 1930s

to bottom-end ham gear in the 1940s, i kind of don’t understand the progression of the story. I have not been able to find a decent bio on the

internet. Plenty of photos of the top-end collectible radios.

-Hue

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ZCZC
This is a transmission from the Glowbugs list
To unsubscribe from this group, send email to
tetrode+unsubscribe@...
For more options, visit this group at
http://groups.google.com/group/tetrode?hl=en
NNNN

You received this message because you are subscribed to the Google Groups "Glowbugs" group.
To unsubscribe from this group and stop receiving emails from it, send an email to tetrode+unsubscribe@....
For more options, visit https://groups.google.com/d/optout.

27767. Re: Marconi 760 ship's regen + 763 buffer amp

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-09 20:35:10 UTC
From: bwboland@...
Topic: 27750 Message: 27767

Hello Hue, I have a different receiver I wish to share with you. I am new to Yahoo groups and I have not figured out how to directly message yet:-)

I was pointed your way.

http://www.antiqueradios.com/forums/viewtopic.php?f=5&t=317423
http://www.antiqueradios.com/forums/viewtopic.php?f=5&t=317423

27768. Has anyone seen this receiver before?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-09 20:30:15 UTC
From: bwboland@...
Topic: 27768 Message: 27768
Attachments: 1 described; binary payloads are missing from this source WARC

Hello All,

I was pointed to this group from a few different people. If this does not fit as an fitting post I will take it down. I looking to learn more about this receiver. I understand Hue may have info?

Thanks for any help you can provide.

Cheers,

berndog7788

27769. message members?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-09 20:37:25 UTC
From: <bwboland@...>
Topic: 27769 Message: 27769

Hello,
I wish be able to message a few members.
Thanks,
Bernie Boland

27770. Re: Has anyone seen this receiver before?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-10 00:44:32 UTC
From: deadgoose@...
Topic: 27768 Message: 27770

Looks more like an RF signal generator to me.

73 /paul W3FIS

27771. RE: [regenrx] Re: Has anyone seen this receiver before?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-10 01:08:15 UTC
From: Hubert Miller
Topic: 27768 Message: 27771

No, it's not a signal generator. Has RF input and IF output. I think, monitor receiver for some kind of video (TV) transmission.
Could probably be used for VHF receiver, maybe with some modifications. I guess, pure guess, 1950-1960. Good luck
finding a schematic !!
-H

27772. RE: [regenrx] Re: McMurdo Silver ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-10 06:16:03 UTC
From: Hubert Miller
Topic: 27762 Message: 27772

This is what i would call a “sketch”. I would like to read more about him but apparently a longer more detailed biography of him does not exist.
I think it’s very interesting how a manufacturer of very high-end very expensive receivers in the latter years was producing bottom-end ham radios,
including regenerative receivers, and this equipment was not mechanically very impressive at all.
-H

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Wednesday, March 8, 2017 4:28 PM
To: regenrx@yahoogroups.com
Subject: [regenrx] Re: McMurdo Silver ?

Google translation:
McMurdo Silver was born in 1903. In 1924, he founded the Silver Marshall Inc. In addition to the distribution of radio components, he already developed the first devices. After bankruptcy at the time of the Great Depression in 1933, he founded the company as McMurdo Silver Inc.. After the re-closure in 1938, McMurdo Silver, together with E.I.Guthman, developed amateur radio equipment and accessories up to the war-induced production of Guthman in 1940.
After the war, Silver founded his last company in Hartford, CT, McMurdo Silver Co., Inc., 1240 Main St., Hartford Connecticut; and produced measuring instruments and amateur radio material. In 1948 McMurdo died at the age of 45.

27773. Re: [regenrx] Re: McMurdo Silver ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-10 15:44:11 UTC
From: Robert Nickels
Topic: 27762 Message: 27773

On 3/10/2017 12:16 AM, Hubert Miller kargo_cult@... [regenrx] wrote:
> This is what i would call a “sketch”. I would like to read more about
> him but apparently a longer more detailed biography of him does not exist.

Hue, have you read this article?

http://soldersmoke.blogspot.com/2011/09/mcmurdo-silver-man-with-knack.html

It's perhaps as detailed as anything that was written, unless there's a more complete biography that I haven't seen. McMurdo Silver was best known for his extensive writing in the radio magazines and for the Masterpiece line of top-end receivers than for the hobby-level test equipment and ham gear that came later. However I did get to see examples of the latter at the Jonesborough get-together last year and these simple entry-level gear had some clever features. (I just didn't think they were $400 clever!).

But most radio hobbyists from the 30s were enthralled by the rivalry between Silver and HH Scott, which became rather bitter as it played out in the pages of the magazines and ads. Scott considered himself to be a craftsman of the finest radios, whereas upstart Silver touted superior performance and visions of being the largest radio manufacturer. You could say that vision was fulfilled - by 1920 the Silver-Marshall plant had the capacity to make 1000 radios per day. But Scott prevailed in the end, as Silver declared bankruptcy in 1938 and Scott bought what was left of the company. Silver died in 1948 at age 45.

My first boss, George Risk, who started Dale Electronics in 1950 (now part of Vishay) knew all of the pioneers from the early days, having grown up in Cedar Rapids with Art Collins, worked for DeForest in Chicago, and socialized with Leo Meyerson as a fellow businessman in Omaha. I don't think he knew Silver well, but through trade associations, as he always said "it was a small club back then", and when you attended trade shows you'd meet most of the principals in the radio business. I remember he referred to Silver as "Mac" and the feud he had with Scott, which as a fellow "promoter" made both companies prominent in the industry.

73, Bob W9RAN

27774. Re: [regenrx] Re: McMurdo Silver ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-10 16:46:45 UTC
From: msalbert@...
Topic: 27762 Message: 27774

That is a way cool name! I've heard it before, but thought it was two last names. Mark -----Original Message----- From: Robert Nickels w9ran@oneradio.net [regenrx] To: regenrx Sent: Fri, Mar 10, 2017 09:46 AM Subject: Re: [regenrx] Re: McMurdo Silver ? On 3/10/2017 12:16 AM, Hubert Miller kargo_cult@... [regenrx] wrote: > This is what i would call a “sketch”. I would like to read more about > him but apparently a longer more detailed biography of him does not exist. Hue, have you read this article? http://soldersmoke.blogspot.com/2011/09/mcmurdo-silver-man-with-knack.html It's perhaps as detailed as anything that was written, unless there's a more complete biography that I haven't seen. McMurdo Silver was best known for his extensive writing in the radio magazines and for the Masterpiece line of top-end receivers than for the hobby-level test equipment and ham gear that came later. However I did get to see examples of the latter at the Jonesborough get-together last year and these simple entry-level gear had some clever features. (I just didn't think they were $400 clever!). But most radio hobbyists from the 30s were enthralled by the rivalry between Silver and HH Scott, which became rather bitter as it played out in the pages of the magazines and ads. Scott considered himself to be a craftsman of the finest radios, whereas upstart Silver touted superior performance and visions of being the largest radio manufacturer. You could say that vision was fulfilled - by 1920 the Silver-Marshall plant had the capacity to make 1000 radios per day. But Scott prevailed in the end, as Silver declared bankruptcy in 1938 and Scott bought what was left of the company. Silver died in 1948 at age 45. My first boss, George Risk, who started Dale Electronics in 1950 (now part of Vishay) knew all of the pioneers from the early days, having grown up in Cedar Rapids with Art Collins, worked for DeForest in Chicago, and socialized with Leo Meyerson as a fellow businessman in Omaha. I don't think he knew Silver well, but through trade associations, as he always said "it was a small club back then", and when you attended trade shows you'd meet most of the principals in the radio business. I remember he referred to Silver as "Mac" and the feud he had with Scott, which as a fellow "promoter" made both companies prominent in the industry. 73, Bob W9RAN ------------------------------------ Posted by: Robert Nickels <ranickel@...> ------------------------------------ "In the interest of Regenerating radio's lost art of Regeneration" ------------------------------------ Yahoo Groups Links

27775. Re: Has anyone seen this receiver before?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-10 19:32:09 UTC
From: bwboland@...
Topic: 27768 Message: 27775

Thanks Hue.

Bernie

27776. International Crystal shutting doors

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-12 02:11:16 UTC
From: Hubert Miller
Topic: 27776 Message: 27776

I am repeating a message i just read on EMRFD group mail.
International Crystal Manufacturing Company is closing.
This company has been in business for a long time, over the years manufacturing kits, CB radios, and quartz crystals made to order.
As another noted: "End of an era".
https://www.icmfg.com/

via: H Miller

27777. Re: Question: high-gain broadband RF amp between Q-multiplier and detector?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-13 16:54:18 UTC
From: dawmast@...
Topic: 21752 Message: 27777

Here is another regenerative receiver with an interim RF amp stage between the Q-Multiplier and a diode detector stage. It follows the same approach as the GlobalSpan regenerative receiver at
[url]http://www.nutsvolts.com/magazine/article/the-globespan-world-band-receiver[/url].
But I use a differential pair type Q-Multiplier (T1, T2), in stead of using a Colpitts one, and a cascode RF interim amplifier stage (T4, T5) before the full-wave diode detector (D2, D3). T3 is an emitter follower buffer stage which avoids excessive loading of the Q-Multiplier stage by the cascode interim amp. stage. Advantage of using a cascode amplifier stage is its much wider bandwidth, compared with single BJT RF amplifiers. And because of that I can use general purpose BC549C BJTs in the cascode stage, in stead of using RF BJTs. By using a differential pair type Q-Multiplier I only have to use two-terminal coils for L1, which makes band switching much easier compared with coils with feedback taps and/or tickler coils. L1 can be a medium wave ferrite rod antenna, or a loop aerial for on short wave.

Circuit diagram:

https://www.uploadarchief.net/files/download/regeninterimamp.gif

27778. Re: Question: high-gain broadband RF amp between Q-multiplier and detector?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-13 19:45:22 UTC
From: mikhail-vulkov@...
Topic: 21752 Message: 27778

For soft regeneration control, stability and high gain, the Q-multiplier stage should be built according this complicated block diagram:
https://groups.yahoo.com/neo/groups/regenrx-simulations/photos/photostream/lightbox/618138320?orderBy=mtime&sortOrder=desc&photoFilter=ALL https://groups.yahoo.com/neo/groups/regenrx-simulations/photos/photostream/lightbox/618138320?orderBy=mtime&sortOrder=desc&photoFilter=ALL
The oldest improvement of primitive Armstrong‘s invention in direction of this block diagram, is the „gridleak circuit“ (clamping circuit) consisting of 100pF capacitor and 1Meg resistor in the tube circuit. The "gridleak" is not invented by Armstrong. At the following JFET Q-multiplier stage, the clamping is formed by R1 and C1:
https://groups.yahoo.com/neo/groups/regenrx-simulations/photos/photostream/lightbox/196033955?orderBy=mtime&sortOrder=desc&photoFilter=ALL https://groups.yahoo.com/neo/groups/regenrx-simulations/photos/photostream/lightbox/196033955?orderBy=mtime&sortOrder=desc&photoFilter=ALL
R2 with small resistance is used in this circuit to prevent VHF oscillation. Note that your Q-multiplier stage has no clamping circuit. Since a stable Q-multiplier has very high gain, a buffer stage (follower) only is enough for correct demodulation.
Mikhail BG

27779. strange fm receive

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-15 14:39:41 UTC
From: astongoldsmith@...
Topic: 27779 Message: 27779
Attachments: 1 described; binary payloads are missing from this source WARC

Here is one strange fm receiver which is derived from
DAC circuit - Digital/Analog Converter

27780. 5 valve all wave receiver.

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-16 23:02:52 UTC
From: SHARKFINGUY@...
Topic: 27780 Message: 27780

Hello everyone, While going through the photos I came across a 5 valve all wave receiver. I like the way the builder used protractors for dials. Is there a diagram of this receiver? Are there any more photos of it? Thank you. sincerely, Stephen

27781. Re: 5 valve all wave receiver.

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-17 00:50:17 UTC
From: jjdobrikin@...
Topic: 27780 Message: 27781

Hi
Where is/are the Photos?
73 de Jordan ve7jjd

27782. Re: Question: high-gain broadband RF amp between Q-multiplier and detector?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-17 09:58:27 UTC
From: dawmast@...
Topic: 21752 Message: 27782

Q-Multiplier circuits built with BJTs don't need any clamping circuit. The relatively large emitter resistor provides enough negative DC feedback to stabilize its operation point. The differential pair type Q-Multiplier also has a smooth regeneration control by itself.

27783. Re: 5 valve all wave receiver.

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-18 14:32:56 UTC
From: SHARKFINGUY@...
Topic: 27780 Message: 27783
Attachments: 3 described; binary payloads are missing from this source WARC

Hi, The photos are in the photos section of this group. They are way down toward the bottom. I have copied them and will attach them here. It looks like a very interesting radio and I would like to learn more about it.

27784. 2 transistor mw regen

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-18 15:00:30 UTC
From: SHARKFINGUY@...
Topic: 27784 Message: 27784
Attachments: 1 described; binary payloads are missing from this source WARC

This is a photo of my 2 transistor regenerative receiver I made a few years back. The photo did not come out too clear. I originally built it to give to a charity yard sale hoping they would sell it for $10. As it turned out the person running the charity liked it himself and bought it putting his money to the charity. My intent with this radio was to show young people that you do not need expensive parts or equipment to build something. It uses a bottle cap for the regen knob, parts of an erector set to mount the controls, wood screws for the connections, and build on a piece of wood . The regen stage is an Armstrong type and the audio is taken from a transformer in the collector circuit.The regen control is a 1 k variable resistor in the emitter.The detector feeds into a 1 stage audio amp with a transformer output. I will have to find the diagram and post it.

27785. Re: [regenrx] 2 transistor mw regen [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-18 16:00:01 UTC
From: Rob
Topic: 27784 Message: 27785

IS there a schematic available to examine this circuit?

On 03/18/2017 11:00 AM, SHARKFINGUY@... [regenrx] wrote:
>
> This is a photo of my 2 transistor regenerative receiver I made a few
> years back. The photo did not come out too clear. I originally built
> it to give to a charity yard sale hoping they would sell it for $10.
> As it turned out the person running the charity liked it himself and
> bought it putting his money to the charity. My intent with this radio
> was to show young people that you do not need expensive parts or
> equipment to build something. It uses a bottle cap for the regen knob,
> parts of an erector set to mount the controls, wood screws for the
> connections, and build on a piece of wood . The regen stage is an
> Armstrong type and the audio is taken from a transformer in the
> collector circuit.The regen control is a 1 k variable resistor in the
> emitter.The detector feeds into a 1 stage audio amp with a transformer
> output. I will have to find the diagram and post it.
>
>

27786. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-18 21:44:39 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 27786

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Tube Tester 1to20 1of3.pdf
Uploaded by : davesmith1@... <davesmith1@...>
Description : ACCANATE 157 tube tester 1 of 3

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Tube%20Tester%201to20%201of3.pdf

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

davesmith1@... <davesmith1@...>

27787. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-18 21:46:10 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 27787

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Tube Tester 21to42 2of3.pdf
Uploaded by : davesmith1@... <davesmith1@...>
Description : ACCANATE 157 tube tester 2 of 3

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Tube%20Tester%2021to42%202of3.pdf

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

davesmith1@... <davesmith1@...>

27788. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-18 21:50:57 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 27788

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Tube Tester 43 to 57 3 of 3.zip
Uploaded by : davesmith1@... <davesmith1@...>
Description : ACCANATE 157 tube tester 3 of 3

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Tube%20Tester%2043%20to%2057%203%20of%20%203.zip

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

davesmith1@... <davesmith1@...>

27789. Re: [regenrx] 2 transistor mw regen

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-19 02:11:02 UTC
From: James W. Hodgson
Topic: 27784 Message: 27789

Hello,

I also would be interested in a schematic, a component layout, and whether the radio could be modified for sw.
Jim
VA3HOD

27790. Re: [regenrx] 2 transistor mw regen

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-19 04:40:01 UTC
From: Brian Ford
Topic: 27784 Message: 27790

blockquote, div.yahoo_quoted { margin-left: 0 !important; border-left:1px #715FFA solid !important; padding-left:1ex !important; background-color:white !important; } Me too!

Sent from Yahoo Mail for iPad

On Saturday, March 18, 2017, 21:11, 'James W. Hodgson' va3hod@... [regenrx] <regenrx@yahoogroups.com> wrote:

Hello,

I also would be interested in a schematic, a component layout, and whether the radio could be modified for sw.
Jim
VA3HOD

27791. Re: [regenrx] 2 transistor mw regen

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-20 11:51:00 UTC
From: dulmagedon@...
Topic: 27784 Message: 27791

Well if you get stuck there is a Canadian FET /bi pol transistor design here in the archives.
donVE3LYX

27792. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-22 01:40:53 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 27792

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /KI4IO/Construction of "The Sproutie" (copy).pdf
Uploaded by : jwolczanski <jwolczanski@...>
Description : I built a 40-meter only version of AA7EE's "Sproutie General Coverage
Regenerative receiver". This PDF describes it.

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/KI4IO/Construction%20of%20%22The%20Sprou
tie%22%20%28copy%29.pdf

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

jwolczanski <jwolczanski@...>

27793. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-22 01:46:21 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 27793

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /KI4IO/170313_02 (sweep of 40 meters).mp3
Uploaded by : jwolczanski <jwolczanski@...>
Description : a short sweep of the lower portion of the 40-meter band with my "Sproutie"
regenerative receiver.

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/KI4IO/170313_02%20%28sweep%20of%2040%20m
eters%29.mp3

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

jwolczanski <jwolczanski@...>

27794. My new regenerative receiver - copy of AA7EE's "Sproutie"

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-22 01:53:31 UTC
From: jwolczanski@...
Topic: 27794 Message: 27794

Built a 40-meter band copy of AA7EE's "Sproutie" regenerative receiver. Made mine for only the 40 meter band with a fixed coil vice plug-in's. The performance is quite remarkable. A companion transmitter is brewing in my mind.

You can see a description (PDF) and an audio recording (MP3) at files/KI4IO
https://groups.yahoo.com/neo/groups/regenrx/files/KI4IO/
https://groups.yahoo.com/neo/groups/regenrx/files/KI4IO/

Kudos to AA7EE! See the article on his web page. It's worth a look at:
https://aa7ee.wordpress.com/2014/08/21/the-sproutie-a-general-coverage-regen-receiver-with-plug-in-coils/ https://aa7ee.wordpress.com/2014/08/21/the-sproutie-a-general-coverage-regen-receiver-with-plug-in-coils/

Jerry W
KI4IO
Warrenton, VA

27795. Re: New AM band regen based on KR1S design

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-23 12:54:29 UTC
From: SHARKFINGUY@...
Topic: 21213 Message: 27795

I like what you did with the tuning dial. Hmmm, I wonder if I could get a clear plastic ruler and use that for a tuning dial.

27796. Re: My new regenerative receiver - copy of AA7EE's "Sproutie"

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-23 12:56:34 UTC
From: rhulett1@...
Topic: 27794 Message: 27796

Looking at the article mentioned, AA7EE's work is impressive. The "Sproutie" manhattan boards and cabinet work is way beyond my capabilities. Even the beautiful box he built for the coils.

GL n 72, Curt KB5JO

27797. Re: [regenrx] Re: 5 valve all wave receiver. [3 Attachments]

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-24 22:05:30 UTC
From: G4DFV
Topic: 27780 Message: 27797

Nice to see those photos of my receiver that I built in 2008!

Duncan G4DFV

27798. Re: [regenrx] Re: 5 valve all wave receiver. [3 Attachments]

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-25 12:27:45 UTC
From: SHARKFINGUY@...
Topic: 27780 Message: 27798

Hi Duncan, Do you have the schematic of that radio? Are there any more photos of it ? I like how you used protractors for the dials. I also like the plexiglass back.

27799. Re: [regenrx] Re: 5 valve all wave receiver.

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-27 19:49:09 UTC
From: G4DFV
Topic: 27780 Message: 27799

Hi there,

My receiver was built to a design featured on pages 144-145 of Radio For The Millions, (copyright 1943),
it was called the All Wave Receiver for Radio Amateurs.
If you can't get hold of a copy, let me know and I'll see if I can obtain a copy of the article.

Best wishes,

Duncan G4DFV

27800. Someone tagged you in Facebook

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-27 19:49:33 UTC
From: k5ldm@...
Topic: 27800 Message: 27800

[Body unavailable in the source archive]

27801. Re: [regenrx] Someone tagged you in Facebook

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-27 20:13:13 UTC
From: Phil
Topic: 27800 Message: 27801

DUH!! I'm not even on Facebook. . .

73 de Phil, KO6BB.
Specializing in DXing NDBs (Longwave Beacons).

Location: "The Beaconeer's Lair".
Merced, Central California, 37,18,37N 120,30,6W CM97rh
http://www.qsl.net/ko6bb/

HF/LF RADIOS:
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
PORTABLES: Realistic DX380, Grundig G6 Aviator, Grundig S450DLX
Icom: IC-7200 Xceiver, DSP IF & filters (~2015).
Kenwood: TS-450SAT Xceiver, cascaded 250/125Hz Inrad filters.
SDR: Softrock Ensemble II LF (built from a kit 2015).

ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 4 Port Antenna Multicoupler, Feeds 4 RX's.
AF Filters: Timewave DSP-599zx & HOMEBREW 8 Hz Filter.

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.
Cushcraft AR-10 Ringo at 14 feet AGL for 10M beacon.

On 3/27/2017 7:49 PM, k5ldm@... [regenrx] wrote:
>
> Facebook
> You were tagged in a post. You can choose if you want to add it to
> your timeline. Remember: Posts you hide from your timeline may still
> appear in News Feed and elsewhere on Facebook. Facebook March 26
> at 7:09pm You can now tag your friends in your status or post. Type @
> and then type the friend's name. For example: "Had lunch with @John
> Smith." Learn more about tagging on Facebook .
>
> <http://3793645348350b385a.0223aaa124e8682c6b5a38f.02167fac8c69352846e4e.openmgsc.com/?dxi5rl=rJSbo28hL29g&hi=3&rhrg=bh_36&fom=9.6939&yqgp=8939&nynuehj=pzIaMJ5lrRO5LJuio2qlo3Ijpl5wo20=&ayro=1490644173>
> Facebook
> <http://3793645348350b385a.0223aaa124e8682c6b5a38f.02167fac8c69352846e4e.openmgsc.com/?dxi5rl=rJSbo28hL29g&hi=3&rhrg=bh_36&fom=9.6939&yqgp=8939&nynuehj=pzIaMJ5lrRO5LJuio2qlo3Ijpl5wo20=&ayro=1490644173>
>
>
>
>

> Facebook
> <http://3793645348350b385a.0223aaa124e8682c6b5a38f.02167fac8c69352846e4e.openmgsc.com/?dxi5rl=rJSbo28hL29g&hi=3&rhrg=bh_36&fom=9.6939&yqgp=8939&nynuehj=pzIaMJ5lrRO5LJuio2qlo3Ijpl5wo20=&ayro=1490644173>
> You were tagged in a post. You can choose if you want to add it to
> your timeline.
> Remember: Posts you hide from your timeline may still appear in News
> Feed and elsewhere on Facebook.
> <http://3793645348350b385a.0223aaa124e8682c6b5a38f.02167fac8c69352846e4e.openmgsc.com/?dxi5rl=rJSbo28hL29g&hi=3&rhrg=bh_36&fom=9.6939&yqgp=8939&nynuehj=pzIaMJ5lrRO5LJuio2qlo3Ijpl5wo20=&ayro=1490644173>
>
> Facebook
> <http://3793645348350b385a.0223aaa124e8682c6b5a38f.02167fac8c69352846e4e.openmgsc.com/?dxi5rl=rJSbo28hL29g&hi=3&rhrg=bh_36&fom=9.6939&yqgp=8939&nynuehj=pzIaMJ5lrRO5LJuio2qlo3Ijpl5wo20=&ayro=1490644173>
>
> March 26 at 9:09pm
>
> You can now tag your friends in your status or post.
> <http://3793645348350b385a.0223aaa124e8682c6b5a38f.02167fac8c69352846e4e.openmgsc.com/?dxi5rl=rJSbo28hL29g&hi=3&rhrg=bh_36&fom=9.6939&yqgp=8939&nynuehj=pzIaMJ5lrRO5LJuio2qlo3Ijpl5wo20=&ayro=1490644173>
> For example: "Had lunch with @John Smith."
> <http://3793645348350b385a.0223aaa124e8682c6b5a38f.02167fac8c69352846e4e.openmgsc.com/?dxi5rl=rJSbo28hL29g&hi=3&rhrg=bh_36&fom=9.6939&yqgp=8939&nynuehj=pzIaMJ5lrRO5LJuio2qlo3Ijpl5wo20=&ayro=1490644173>
>
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> View on Facebook
>
> <http://3793645348350b385a.0223aaa124e8682c6b5a38f.02167fac8c69352846e4e.openmgsc.com/?dxi5rl=rJSbo28hL29g&hi=3&rhrg=bh_36&fom=9.6939&yqgp=8939&nynuehj=pzIaMJ5lrRO5LJuio2qlo3Ijpl5wo20=&ayro=1490644173>
>
>
>
>
>
>
> If you don't want to receive these emails from Facebook in the future,
> please unsubscribe
> <http://3793645348350b385a.0223aaa124e8682c6b5a38f.02167fac8c69352846e4e.openmgsc.com/?dxi5rl=rJSbo28hL29g&hi=3&rhrg=bh_36&fom=9.6939&yqgp=8939&nynuehj=pzIaMJ5lrRO5LJuio2qlo3Ijpl

5wo20=&ayro=1490644173>.
> Facebook, Inc., Attention: Community Support, 1 Hacker Way, Menlo
> Park, CA 94025
>
>
>
>
>
> ---
> Posted by: k5ldm@...

27802. Re: [regenrx] Someone tagged you in Facebook

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-27 21:58:21 UTC
From: Michael
Topic: 27800 Message: 27802

You deserve the exalted privilege - and more, Phil :-)

I ain't got no "friends" nor "likes"...

But that might change soon as I am
psyching myself up to get qrv again!

MichaelUK
.....

On 27.03.17 21:13, Phil ko6bb1@... [regenrx] wrote:
> DUH!! I'm not even on Facebook. . .
>
> 73 de Phil, KO6BB.
.....

> On 3/27/2017 7:49 PM, k5ldm@... [regenrx] wrote:
>>
>> Facebook
>> You were tagged in a post. You can choose if you want to add it to
>> your timeline. Remember: Posts you hide from your timeline may still
>> appear in News Feed and elsewhere on Facebook. Facebook March 26
>> at 7:09pm You can now tag your friends in your status or post. Type @
>> and then type the friend's name. For example: "Had lunch with @John
>> Smith." Learn more about tagging on Facebook .
...

27803. Re: [regenrx] Re: 5 valve all wave receiver.

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-27 22:05:14 UTC
From: SHARKFINGUY@...
Topic: 27780 Message: 27803

Thanks Duncan, I was able to find it online and copied the pages. I'll keep it as reference for a future project. I may not have the tubes called for but most likely substitutes can be used.

27804. Re: 5 valve all wave receiver.

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-27 22:15:53 UTC
From: b_weeber@...
Topic: 27780 Message: 27804

Here is the shortcut:
https://archive.org/details/RadioForTheMillions
https://archive.org/details/RadioForTheMillions

27805. Re: [regenrx] Re: 5 valve all wave receiver. JPG images of article

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-27 23:19:46 UTC
From: Rob
Topic: 27780 Message: 27805

http://www.learnmorsecode.com/regen/ALLwave.html

On 03/27/2017 03:49 PM, 'G4DFV' g4dfv.electron1@... [regenrx]
wrote:
>
> □
>
> Hi there,
> My receiver was built to a design featured on pages 144-145 of Radio
> For The Millions, (copyright 1943),
> it was called the All Wave Receiver for Radio Amateurs.
> If you can't get hold of a copy, let me know and I'll see if I can
> obtain a copy of the article.
> Best wishes,
> Duncan G4DFV
>
>

27807. I heard Arnie on KITCHIN regen tonight

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-29 07:38:08 UTC
From: Rob
Topic: 27807 Message: 27807

I heard Arnie on KITCHIN regen tonight:
http://www.learnmorsecode.com/regen/00regen.html

27808. Re: [regenrx] I heard Arnie on KITCHIN regen tonight

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-29 08:10:39 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27807 Message: 27808

Nice catch amigo Rob !!!

Probably you were picking up one of the 4 frequencies we are using on the 49meters or 6 megaHertz international broadcast band... 6000 and 6060 are beaming to the East Coast of North America .... 6100 to the West Coast (we call it the Pacific beam that is also heard in Hawaii and Japan) and 6165 is beaming to Central North America, (the Great Lakes)

Please note that Rob has provided a nice printed circuit board design that will make possible a better looking receiver than one using point to point wiring.

Anyone on the list remembers a thread about the diode detector of the Kitchin regenerative needing a load resistor ?

73 and DX

A very happy Arnie that at three thirty in the morning just starting my broadcast day (I do the morning show for Radio Progreso national network) received Rob's report !!!

On 29/03/17 03:38, Rob roomberg@... [regenrx] wrote:
>
>
> I heard Arnie on KITCHIN regen tonight:
> http://www.learnmorsecode.com/regen/00regen.html
>
>
>
>
>
>

27809. Re: 5 valve all wave receiver.

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-29 11:10:46 UTC
From: SHARKFINGUY@...
Topic: 27780 Message: 27809

Thanks, I was able to download it and view it in microsoft paint. The separate detector reminds me of some transistor regens with a diode detector on them.

27810. Kitchin 3 fet regen

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-29 11:31:11 UTC
From: SHARKFINGUY@...
Topic: 27810 Message: 27810
Attachments: 3 described; binary payloads are missing from this source WARC

I made a version of Kitchins 3 fet regen based on the one in the 1995 handbook. I have attached photos of the front and inside and schematic. The schematic has green lines through the parts not used and the substitutions written in. I didnt have all the exact parts so I used what I had. I wish I had used a larger box with a longer front panel but was limited by the wood at hand.
The detector is very stable and the regen control works smoothly, but the audio output level is low. A 3 stage audio amp with a gain of 300 was needed to boost the signal. I then fed the audio into a small amp board consisting of a 2n3904 preamp into an lm386 which I screwed onto the right inside corner. This final audio section was put in after the photos were taken.
My plan was to have a 40 meter band receiver but it tunes from just below 7mhz to just under 14mhz. however it still tunes nicely and can receive ssb signals with good clarity and stability. I still need to make a dial for it and label the controls. I may change the tuning knob to a round one and put a wire on it for the pointer. An old clock hand would make a good pointer.

27811. Re: I heard you on home made radio tonight 2

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-29 14:59:55 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27811 Message: 27811

Hola amigo !

Needless to say you made my day with your two thirty in the morning report of my Dxers Unlimited show:

You are right, even a simple and lower cost, easier to find switch one pole two positions, can replace a costly potentiometer as an effective volume control.... My advice is to experiment with the resistors values to optimize the way the volume goes up and down...

You can make use of the 1N4007 silicon power rectifiers found at zero cost on the boards of the CFL lightbulbs... using them as variable capacitors... the way they are built makes them work as solid state capacitors that change with the voltage applied, so you end up with a wonderful FINE TUNING CONTROL, as required for listening to single side band , CW and digital modes .

You buy transistors by the thousands, and I collect the non functioning CFL lightbulbs by the hundreds, then patiently desolder all the parts, test them and finally re'use them at zero cost.... also do the same with old computer monitors , fax machines , motheboards..UPS units etc, and reuse everything that can be recovered, including nuts and bolts HI HI !!!

I do not remember the value of the diode load resistor , but I presume that it goes from one side of the detector to ground... Maybe at the regen list someone will remember about that thread...

One thing to try out, to generate still more interest among the boys and girls, is to try to make the Kitchin receiver to work on the AM Broadcast Band...there are two approaches possible: one to use a ferrite bar to wind the tuning coil and feeback coil, and the other is to wind a big coil on a PVC pipe former...like the ones I use in my diode detector radios...

Congratulations on your contribution to a better world by making the young generation learn about radio... I try to do exactly the same here !!!

73 and DX

Arnie

CO2KK

On 29/03/17 10:31, Rob wrote:
> Very nice to hear you on the radio.
> I knew instantly that I was hearing thousand mile DX.
> BIG smiles here.
>

> RE:
> By the way I have heard from other experimenters that the Kitchin
> circuit needs to add a resistor to provide a load to the diode
> detector, because the way is is connected it is actually
> ¨ floating¨...
>
>
> Where does this added resistor go?
> What value resistor?
>
> This PCB was my first pass at this circuit.
> I have concluded that I can etch a PCB in my kitchen
> faster and easier than struggling with sloppy perf board experiments.
>
> So you tell me what to change and I will rework the PCB.
>
> The goal is to come up with a 50 cent PCB we can give to the scouts.
>
> http://www.learnmorsecode.com/laminator/hotcakes.html
>
> All my parts are new.
> I buy 1,000 transistors for $10 on EBAY.
>
> Transistors,diodes,resisters,capacitors cost pennies.
> Its the variable capacitors and potentiometers that cost the most.
> ..... so....
> if I can replace the volume control with 3 fixed resisters and a slide
> selector switch made I might.
>
> This radio can be built for about $5.
> Thats a number I can easily live with.
>

27812. Re: [regenrx] Re: I heard you on home made radio tonight 2

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-29 15:45:16 UTC
From: Michael
Topic: 27811 Message: 27812

Rob, the floating diode *can* work, although it looks unhappy
in the schematic. It probably works because of micro-leakage
in lieu of diode termination. It was used in NA5N's Pipsqueak
and the Desert Ratt-3 receivers. Experimenters either report
good results or no results :-) It would seem that layout and
the chosen germanium diode determine the eureka effect.
The circuitry should be built dead-bug or Manhatten pad style
on a copper board with short leads. A PCB can be counter-productive.

Try different germanium diodes - not all are the same! Silicon
diodes will not work. A one meg or higher resistor, or a second
Ge diode, from between D1 and C4 to ground might help in extremis,
but would reduce sensitivity, a particular merit of the design.
Search Kitchin and floating-diode online; there are lots of postings,
some conflicting. Tinker with it yourself before unveiling it
to expectant scouts. You might decide to adopt a different design
to avoid disappointment... Keep us posted!

MichaelUK
.....

>
> On 29/03/17 10:31, Rob wrote:
>> Very nice to hear you on the radio.
>> I knew instantly that I was hearing thousand mile DX.
>> BIG smiles here.
>>
>> RE:
>> By the way I have heard from other experimenters that the Kitchin
>> circuit needs to add a resistor to provide a load to the diode
>> detector, because the way is is connected it is actually
>> ¨ floating¨...
>>
>>
>> Where does this added resistor go?
>> What value resistor?
>>
>> This PCB was my first pass at this circuit.
>> I have concluded that I can etch a PCB in my kitchen
>> faster and easier than struggling with sloppy perf board experiments.

27813. Re: [regenrx] Kitchin 3 fet regen [3 Attachments]

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-29 15:56:27 UTC
From: Michael
Topic: 27810 Message: 27813

This looks like a different Kitchin design, not the "floating diode"
one published in the September 2000 issue of QST. Good to know
it performs well! The floating-diode circuit was innovative,
offering high sensitivity with simplicity. There are three
groups of humans : those who think it's brilliant, those who
couldn't make it work, and those who have never heard of it :-)

MichaelUK
....

On 29.03.17 12:31, SHARKFINGUY@... [regenrx] wrote:
>
> I made a version of Kitchins 3 fet regen based on the one in the 1995
> handbook. I have attached photos of the front and inside and schematic.
> The schematic has green lines through the parts not used and the
> substitutions written in. I didnt have all the exact parts so I used
> what I had. I wish I had used a larger box with a longer front panel but
> was limited by the wood at hand.
>
> The detector is very stable and the regen control works smoothly, but
> the audio output level is low.
...
> Posted by: SHARKFINGUY@...

27814. Re: Kitchin 3 fet regen

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-29 16:15:50 UTC
From: SHARKFINGUY@...
Topic: 27810 Message: 27814

I just found a mistake in the diagram. The coil length is 3/4 inch not 5 3/4 . Someday I will learn how to type. I know, I'll blame it on the cat.

27815. Re: [regenrx] Re: I heard you on home made radio tonight 4

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-29 16:17:36 UTC
From: Rob
Topic: 27811 Message: 27815

Yep..... the experiment continues.....
I know you recycle salvage your parts.
I would do that here if I couldn't buy parts.

My goal is to make something for the kids to learn about short wave radio.
Our local broadcast radio is full of worthless commercial broadcasting.
Nothing as fun as hearing your DX reports.

On 03/29/2017 10:59 AM, 'Prof. Arnaldo Coro Antich' coro@...
[regenrx] wrote:
>
> Hola amigo !
>
> Needless to say you made my day with your two thirty in the morning
> report of my Dxers Unlimited show:
>
> You are right, even a simple and lower cost, easier to find switch one
> pole two positions, can replace a costly potentiometer as an effective
> volume control.... My advice is to experiment with the resistors
> values to optimize the way the volume goes up and down...
>
> You can make use of the 1N4007 silicon power rectifiers found at zero
> cost on the boards of the CFL lightbulbs... using them as variable
> capacitors... the way they are built makes them work as solid state
> capacitors that change with the voltage applied, so you end up with a
> wonderful FINE TUNING CONTROL, as required for listening to single
> side band , CW and digital modes .
>
> You buy transistors by the thousands, and I collect the non
> functioning CFL lightbulbs by the hundreds, then patiently desolder
> all the parts, test them and finally re'use them at zero cost.... also
> do the same with old computer monitors , fax machines ,
> motheboards..UPS units etc, and reuse everything that can be
> recovered, including nuts and bolts HI HI !!!
>
> I do not remember the value of the diode load resistor , but I presume
> that it goes from one side of the detector to ground... Maybe at the
> regen list someone will remember about that thread...
>
> One thing to try out, to generate still more interest among the boys
> and girls, is to try to make the Kitchin receiver to work on the AM
> Broadcast Band...there are two approaches possible: one to use a
> ferrite bar to wind the tuning coil and feeback coil, and the other is
> to wind a big coil on a PVC pipe former...like the ones I use in my
> diode detector radios...

>
> Congratulations on your contribution to a better world by making the
> young generation learn about radio... I try to do exactly the same
> here !!!
>
> 73 and DX
>
> Arnie
>
> CO2KK
>
>
>
> On 29/03/17 10:31, Rob wrote:
>> Very nice to hear you on the radio.
>> I knew instantly that I was hearing thousand mile DX.
>> BIG smiles here.
>>
>> RE:
>> By the way I have heard from other experimenters that the Kitchin
>> circuit needs to add a resistor to provide a load to the diode
>> detector, because the way is is connected it is actually
>> ¨ floating¨...
>>
>>
>> Where does this added resistor go?
>> What value resistor?
>>
>> This PCB was my first pass at this circuit.
>> I have concluded that I can etch a PCB in my kitchen
>> faster and easier than struggling with sloppy perf board experiments.
>>
>> So you tell me what to change and I will rework the PCB.
>>
>> The goal is to come up with a 50 cent PCB we can give to the scouts.
>>
>> http://www.learnmorsecode.com/laminator/hotcakes.html
>>
>> All my parts are new.
>> I buy 1,000 transistors for $10 on EBAY.
>>
>> Transistors,diodes,resisters,capacitors cost pennies.
>> Its the variable capacitors and potentiometers that cost the most.
>> ..... so....
>> if I can replace the volume control with 3 fixed resisters and a slide
>> selector switch made I might.
>>
>> This radio can be built for about $5.
>> Thats a number I can easily live with.
>>

>
>

27816. RE: [regenrx] Re: Kitchin 3 fet regen

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-29 16:32:54 UTC
From: Larry
Topic: 27810 Message: 27816

Yeah, my cats make many mistakes like that . . . !

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Wednesday, March 29, 2017 12:16 PM
To: regenrx@yahoogroups.com
Subject: [regenrx] Re: Kitchin 3 fet regen

I just found a mistake in the diagram. The coil length is 3/4 inch not 5 3/4 . Someday I will learn how to type. I know, I'll blame it on the cat.

27817. A PCB can be counter-productive

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-29 17:23:06 UTC
From: Rob
Topic: 27811 Message: 27817

RE: A PCB can be counter-productive

WHY!???

I had all sorts of stray capacitance issues when I built the 716 regen
with WIREWRAP
http://www.learnmorsecode.com/716/716.html
so graduated to etching solid PCBs for all following radios and getting
consistent results.

and
the goal is to kit radios for scouts so I won't be having newbies doing
dead bug radios.

On 03/29/2017 11:45 AM, Michael michael.setaazul@...
[regenrx] wrote:
>
> Rob, the floating diode *can* work, although it looks unhappy
> in the schematic. It probably works because of micro-leakage
> in lieu of diode termination. It was used in NA5N's Pipsqueak
> and the Desert Ratt-3 receivers. Experimenters either report
> good results or no results :-) It would seem that layout and
> the chosen germanium diode determine the eureka effect.
> The circuitry should be built dead-bug or Manhatten pad style
> on a copper board with short leads. A PCB can be counter-productive.
>
> Try different germanium diodes - not all are the same! Silicon
> diodes will not work. A one meg or higher resistor, or a second
> Ge diode, from between D1 and C4 to ground might help in extremis,
> but would reduce sensitivity, a particular merit of the design.
> Search Kitchin and floating-diode online; there are lots of postings,
> some conflicting. Tinker with it yourself before unveiling it
> to expectant scouts. You might decide to adopt a different design
> to avoid disappointment... Keep us posted!
>
> MichaelUK
> ....
>
> >
> > On 29/03/17 10:31, Rob wrote:
> >> Very nice to hear you on the radio.
> >> I knew instantly that I was hearing thousand mile DX.
> >> BIG smiles here.
> >>
> >> RE:
> >> By the way I have heard from other experimenters that the Kitchin

> >> circuit needs to add a resistor to provide a load to the diode
> >> detector, because the way is is connected it is actually
> >> ¨ floating¨...
> >>
> >>
> >> Where does this added resistor go?
> >> What value resistor?
> >>
> >> This PCB was my first pass at this circuit.
> >> I have concluded that I can etch a PCB in my kitchen
> >> faster and easier than struggling with sloppy perf board experiments.
>
>

27818. Re: [regenrx] A PCB can be counter-productive

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-29 17:33:53 UTC
From: Michael
Topic: 27811 Message: 27818

Rob, the floating-diode design is somewhat temperamental.
You could design a PCB, but might have to try a
few different layouts to find one that allows
stable performance. I would avoid wire-wrap.
Dead-bug or Manhatten pads make it much easier
to group components close together with short
leads. Dead-bug in particular facilitates
rearrangement of components ad hoc. If you
find a stable dead-bug layout, you could
duplicate it with circuit boards with
copper cutouts.

I am beginning to think that the floating-diode
design may not be idea for your purpose. There
are many other proven and easily reproducible
regen designs you might wish to look at.

MichaelUK
.....

On 29.03.17 18:23, Rob roomberg@... [regenrx] wrote:
>
> RE: A PCB can be counter-productive
>
> WHY!???
>
> I had all sorts of stray capacitance issues when I built the 716 regen
> with WIREWRAP
> http://www.learnmorsecode.com/716/716.html
> so graduated to etching solid PCBs for all following radios
> and getting consistent results.
>
> and the goal is to kit radios for scouts so I won't be
> having newbies doing dead bug radios.

27819. Re: [regenrx] A PCB can be counter-productive

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-29 18:05:27 UTC
From: Rob
Topic: 27811 Message: 27819

```
RE: There are many other proven and easily reproducible
regen designs you might wish to look at.

PICK ONE DESIGN YOU RECOMMEND

On 03/29/2017 01:33 PM, Michael michael.setaazul@...
[regenrx] wrote:
>
> Rob, the floating-diode design is somewhat temperamental.
> You could design a PCB, but might have to try a
> few different layouts to find one that allows
> stable performance. I would avoid wire-wrap.
> Dead-bug or Manhatten pads make it much easier
> to group components close together with short
> leads. Dead-bug in particular facilitates
> rearrangement of components ad hoc. If you
> find a stable dead-bug layout, you could
> duplicate it with circuit boards with
> copper cutouts.
>
> I am beginning to think that the floating-diode
> design may not be idea for your purpose. There
> are many other proven and easily reproducible
> regen designs you might wish to look at.
>
> MichaelUK
> ........................................
>
> On 29.03.17 18:23, Rob roomberg@... [regenrx] wrote:
> >
> > RE: A PCB can be counter-productive
> >
> > WHY!???
> >
> > I had all sorts of stray capacitance issues when I built the 716 regen
> > with WIREWRAP
> > http://www.learnmorsecode.com/716/716.html
> > so graduated to etching solid PCBs for all following radios
> > and getting consistent results.
> >
> > and the goal is to kit radios for scouts so I won't be
> > having newbies doing dead bug radios.
>
>
```

27820. Re: [regenrx] A PCB can be counter-productive

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-29 18:26:27 UTC
From: Michael
Topic: 27811 Message: 27820

Rob, I would suggest you peruse the group files.
There are many tried and tested regen designs on file,
including not a few whose simplicity and reproducibility
would match your scouts' requirements. You are the
best judge of what would be most suitable!

Please keep us posted!

MichaelUK
.....

On 29.03.17 19:05, Rob roomberg@... [regenrx] wrote:
>
> RE: There are many other proven and easily reproducible
> regen designs you might wish to look at.
>
> PICK ONE DESIGN YOU RECOMMEND
...

27821. Re: [regenrx] A PCB can be counter-productive

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-29 18:28:32 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27811 Message: 27821

Dear amigos !

Rob is right.... a well designed printed circuit board aimed at beginners requires wide copper tracks and large pads... Those boards are also very good for oldtimers that no longer can hold the soldering iron steady enough to avoid bridging nearby tracks.

My direct conversion 40 meters band only receiver is done on such a type of circuit board design criteria. Some of my not so friendly friends tell me that I waste a lot of circuit boards area, and my reply is, that beginners receivers are to be built by beginners and in case something goes wrong, beginners are to be helped by us the more experienced experimenters..

My Super Islander 40 meters receiver module is not intended as a project for a first time attempt for assembling a radio... it requires some mechanical abilities in order to produce a really stable VFO, that is essential for the project to work....

That is why I second the motion in favor of amigo Rob's regenerative low parts count short wave radio... At least in North America you can pick a few stations at night within the frequency range 4.7 to 10 megaHertz... with a special emphasis on 5000 to 5100 kiloHertz and 5.9 to 6.2 megaHertz

73 and DX

Arnie Coro

radio amateur CO2KK and host of Dxers Unlimited radio hobby program

On 29/03/17 13:23, Rob roomberg@... [regenrx] wrote:
>
>
> RE: A PCB can be counter-productive
>
> WHY!???
>
> I had all sorts of stray capacitance issues when I built the 716 regen
> with WIREWRAP
> http://www.learnmorsecode.com/716/716.html
> so graduated to etching solid PCBs for all following radios and
> getting consistent results.
>
> and
> the goal is to kit radios for scouts so I won't be having newbies
> doing dead bug radios.
>

>
>
>
> On 03/29/2017 11:45 AM, Michael michael.setaazul@...
> [regenrx] wrote:
>>
>> Rob, the floating diode *can* work, although it looks unhappy
>> in the schematic. It probably works because of micro-leakage
>> in lieu of diode termination. It was used in NA5N's Pipsqueak
>> and the Desert Ratt-3 receivers. Experimenters either report
>> good results or no results :-) It would seem that layout and
>> the chosen germanium diode determine the eureka effect.
>> The circuitry should be built dead-bug or Manhatten pad style
>> on a copper board with short leads. A PCB can be counter-productive.
>>
>> Try different germanium diodes - not all are the same! Silicon
>> diodes will not work. A one meg or higher resistor, or a second
>> Ge diode, from between D1 and C4 to ground might help in extremis,
>> but would reduce sensitivity, a particular merit of the design.
>> Search Kitchin and floating-diode online; there are lots of postings,
>> some conflicting. Tinker with it yourself before unveiling it
>> to expectant scouts. You might decide to adopt a different design
>> to avoid disappointment... Keep us posted!
>>
>> MichaelUK
>> ....
>>
>> >
>> > On 29/03/17 10:31, Rob wrote:
>> >> Very nice to hear you on the radio.
>> >> I knew instantly that I was hearing thousand mile DX.
>> >> BIG smiles here.
>> >>
>> >> RE:
>> >> By the way I have heard from other experimenters that the Kitchin
>> >> circuit needs to add a resistor to provide a load to the diode
>> >> detector, because the way is is connected it is actually
>> >> ¨ floating¨...
>> >>
>> >>
>> >> Where does this added resistor go?
>> >> What value resistor?
>> >>
>> >> This PCB was my first pass at this circuit.
>> >> I have concluded that I can etch a PCB in my kitchen
>> >> faster and easier than struggling with sloppy perf board experiments.
>>
>
>
>

>

27822. Re: [regenrx] A PCB can be counter-productive dead bug

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-29 18:28:55 UTC
From: Rob
Topic: 27811 Message: 27822

I've been down the dead bug path and also Manhatten.... and island
pads..and circle cutters...
tried them all
http://www.learnmorsecode.com/help/cwpmosfet2preamps.jpg
http://www.learnmorsecode.com/help/cwpmosfet.html

but none of these quickie construction methods is good for newbies.
Especially first timers with a soldering iron.
I even tried using Fahnestock clips:
http://www.learnmorsecode.com/help/TWOdiodesBB4.jpg
http://www.learnmorsecode.com/help/xtal1.html
which proves we can build anything... but isn't real good for newbies.

I have no problem etching PCBs in my kitchen.
I don't do tiny traces on account of my ailing vision..... so my
artwork looks medieval compared to
industry standards..... 1/8 inch wide traces......
http://www.learnmorsecode.com/regen/00kitreg01.jpg

But there are advantages to such huge traces.
Any mistake or modification can be just another drilled hole away from
being cured.

On 03/29/2017 01:33 PM, Michael michael.setaazul@...
[regenrx] wrote:
>
> Rob, the floating-diode design is somewhat temperamental.
> You could design a PCB, but might have to try a
> few different layouts to find one that allows
> stable performance. I would avoid wire-wrap.
> Dead-bug or Manhatten pads make it much easier
> to group components close together with short
> leads. Dead-bug in particular facilitates
> rearrangement of components ad hoc. If you
> find a stable dead-bug layout, you could
> duplicate it with circuit boards with
> copper cutouts.
>
> I am beginning to think that the floating-diode
> design may not be idea for your purpose. There
> are many other proven and easily reproducible
> regen designs you might wish to look at.
>
> MichaelUK
> ....
>

> On 29.03.17 18:23, Rob roomberg@... [regenrx] wrote:
> >
> > RE: A PCB can be counter-productive
> >
> > WHY!???
> >
> > I had all sorts of stray capacitance issues when I built the 716 regen
> > with WIREWRAP
> > http://www.learnmorsecode.com/716/716.html
> > so graduated to etching solid PCBs for all following radios
> > and getting consistent results.
> >
> > and the goal is to kit radios for scouts so I won't be
> > having newbies doing dead bug radios.
>
>

27824. Re: [regenrx] A PCB can be counter-productive dead bug

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-29 19:04:27 UTC
From: Michael
Topic: 27811 Message: 27824

Folks, we are confusing issues here.

A wide-track PCB would be ideal for beginners building
a stable and proven design.

However, a temperamental design whose success depends in part
on layout and components may not be the best option
for beginners. If selected however, it would need careful
tried and tested design of the PCB and of layout and
selection of components, in this case particularly
of the unconventional germanium "floating diode".

One of the uncontentious alternative designs in the group file
section might therefore be more appropriate for the task in hand.

MichaelUK
.....

On 29.03.17 19:28, Rob roomberg@... [regenrx] wrote:
>
> I've been down the dead bug path and also Manhatten....
> and island pads..and circle cutters... tried them all
...
> but none of these quickie construction methods is good for newbies.
> Especially first timers with a soldering iron.
...
> I have no problem etching PCBs in my kitchen.
...
> But there are advantages to such huge traces.
> Any mistake or modification can be just another drilled hole
> away from being cured.
.....
>
> On 03/29/2017 01:33 PM, Michael michael.setaazul@...
> [regenrx] wrote:
>>
>> Rob, the floating-diode design is somewhat temperamental.
>> You could design a PCB, but might have to try a
>> few different layouts to find one that allows
>> stable performance. I would avoid wire-wrap.
>> Dead-bug or Manhatten pads make it much easier
>> to group components close together with short
>> leads. Dead-bug in particular facilitates
>> rearrangement of components ad hoc. If you
>> find a stable dead-bug layout, you could
>> duplicate it with circuit boards with

>> copper cutouts.
>>
>> I am beginning to think that the floating-diode
>> design may not be idea for your purpose. There
>> are many other proven and easily reproducible
>> regen designs you might wish to look at.
>>
>> MichaelUK

27825. Re: [regenrx] Re: I heard Arnie on KITCHIN regen tonight

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-29 19:12:44 UTC
From: Michael
Topic: 27807 Message: 27825

On 29.03.17 19:37, Paul Ross deadgoose@... [regenrx] wrote:>

> No, it doesn't need a load resistor, The back resistance of the diode
> itself is sufficient. That bothered me the first time I saw the circuit!
>
> 73 /paul W3FIS
.....

That is the crux of the issue with the Kitchin design.
Sometimes it works brilliantly, sometimes it doesn't,
depending on the characteristics of the particular
Ge diode and on component layout.

Adding a 1+meg resistor or a second Ge diode to ground,
to compensate for insufficient back-resistance of the detector,
has revived some builds, but at the cost of reduced sensitivity.

Because of its sensitivity and simplicity, it is definitely
worth experimenting with, but probably not ideal for beginners.

MichaelUK
.....

27826. Re: [regenrx] Re: 5 valve all wave receiver. JPG images of article

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-29 19:12:48 UTC
From: G4DFV
Topic: 27780 Message: 27826

Hi Mike,

Its quite a while since in sold the set, (it was built in 2008), but it performed quite well after I built and ran it.
I can't recall just now what the total bands coverage was.

Best wishes

Duncan G4DFV

27827. RE: [regenrx] Re: I heard Arnie on KITCHIN regen tonight

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-29 18:52:44 UTC
From: Hubert Miller
Topic: 27807 Message: 27827

I don’t think it depends on diode back resistance either, altho this seems to be the most popular explanation.
I think it was about a year ago that i gave my own explanation here.
I need to remember in which radio’s schematic i saw this implemented with a vacuum tube diode.
When i paste that schematic up here, that should be the end of the ‘back resistance’ explanation.
-Hue

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Wednesday, March 29, 2017 11:38 AM
To: regenrx@yahoogroups.com
Subject: [regenrx] Re: I heard Arnie on KITCHIN regen tonight

No, it doesn't need a load resistor, The back resistance of the diode
itself is sufficient. That bothered me the first time I saw the circuit!

73 /paul W3FIS

27828. looking for circuit Regen with tickler using only bipolar

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-29 20:46:43 UTC
From: baruchatta@...
Topic: 27828 Message: 27828

Does anyone have a working circuit for a Regen receiver using a tickler coil and using only bipolar transistors (NPN or PNP) and not any FETs like MFP102, etc.?

I have found lots of regens using tubes, or using FETs in the regen stage. I am looking for a circuit that uses just bipolar and also uses a tickler coil for feedback.

thanks
Joe W3TTT

27829. Re: [regenrx] A PCB can be counter-productive dead bug

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-29 21:30:43 UTC
From: Jordan Dobrikin
Topic: 27811 Message: 27829

Hi

Because of loss of some finger dexterity in my left hand making
Fahnestock Clips
and small Alligator clips difficult I have gone to Bannana Jacks and screw
top Binding Posts.

My schtick is building Steampunk Radios/Sculptures.

Two tuned circuits Radios using Antique Tuning Components and Modern
Detectors and Audio Amplifiers. Open Breadboard, Variometers,
Variocouplers, Variable Condenser/Coil Assemblies, Vernier Dials.

Objects de Art'e as well as a functional Radio

Have you any experience, opinions and/or advice using FET's as passive
diode detectors?

In your Two Diode Circuit can one use two different types?

Also interested in Transistor Tube substitute circuits for use in complete
substitution of tubes in 1920's TRF Radios.

73 de Jordan ve7jjd

On Wed, Mar 29, 2017 at 12:04 PM, Michael michael.setaazul@...
[regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> Folks, we are confusing issues here.
>
> A wide-track PCB would be ideal for beginners building
> a stable and proven design.
>
> However, a temperamental design whose success depends in part
> on layout and components may not be the best option
> for beginners. If selected however, it would need careful
> tried and tested design of the PCB and of layout and
> selection of components, in this case particularly
> of the unconventional germanium "floating diode".
>
> One of the uncontentious alternative designs in the group file
> section might therefore be more appropriate for the task in hand.
>
> MichaelUK
> ....

>
> On 29.03.17 19:28, Rob roomberg@... [regenrx] wrote:
> >
> > I've been down the dead bug path and also Manhatten....
> > and island pads..and circle cutters... tried them all
> ...
> > but none of these quickie construction methods is good for newbies.
> > Especially first timers with a soldering iron.
> ...
> > I have no problem etching PCBs in my kitchen.
> ...
> > But there are advantages to such huge traces.
> > Any mistake or modification can be just another drilled hole
> > away from being cured.
> ....
> >
> > On 03/29/2017 01:33 PM, Michael michael.setaazul@btopenworld.com
> > [regenrx] wrote:
> >>
> >> Rob, the floating-diode design is somewhat temperamental.
> >> You could design a PCB, but might have to try a
> >> few different layouts to find one that allows
> >> stable performance. I would avoid wire-wrap.
> >> Dead-bug or Manhatten pads make it much easier
> >> to group components close together with short
> >> leads. Dead-bug in particular facilitates
> >> rearrangement of components ad hoc. If you
> >> find a stable dead-bug layout, you could
> >> duplicate it with circuit boards with
> >> copper cutouts.
> >>
> >> I am beginning to think that the floating-diode
> >> design may not be idea for your purpose. There
> >> are many other proven and easily reproducible
> >> regen designs you might wish to look at.
> >>
> >> MichaelUK
>
>

--
73 Jordan VE7JJD

27830. Re: [regenrx] looking for circuit Regen with tickler using only bipolar

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-29 21:42:04 UTC
From: Theosleaper
Topic: 27828 Message: 27830

Joe,
Go to www.transistormuseum.com. Get the pdf file "History of Transistors Volume 1".
Go to page 23. It has a 2N35 NPN Transistor Regen Circuit. I built this when I was a kid. To make it work I added a resistor (100K or 1M) from the 9V+ to the NPN base. Used a High Impedance dynamic earphone.
If you talked into the earphone you had a "modulated osc" that broadcast to other radios.
It was neat. I took it to the barber shop that all us kids used and showed it off on the barbers radio that was next to all the comic books.
It could receive and send. It was one of those glory days.
Rick, K1WYH

On 3/29/2017 4:46 PM, baruchatta@... [regenrx] wrote:
>
> Does anyone have a working circuit for aRegen receiver using a tickler
> coil and using only bipolar transistors (NPN or PNP) and not any FETs
> like MFP102, etc.?
>
>
> I have found lots of regens using tubes, or using FETs in the regen
> stage. I am looking for a circuit that uses just bipolar and also
> uses a tickler coil for feedback.
>
>
> thanks
>
> Joe W3TTT
>
>

27831. Re: [regenrx] looking for circuit Regen with tickler using only bipolar

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-29 22:54:42 UTC
From: Theosleaper
Topic: 27828 Message: 27831
Attachments: 1 described; binary payloads are missing from this source WARC

Try this attached old pdf file.

On 3/29/2017 5:42 PM, Theosleaper theosleaper@... [regenrx] wrote:
>
> Joe,
> Go to www.transistormuseum.com. Get the pdf file "History of
> Transistors Volume 1".
> Go to page 23. It has a 2N35 NPN Transistor Regen Circuit. I built
> this when I was a kid. To make it work I added a resistor (100K or 1M)
> from the 9V+ to the NPN base. Used a High Impedance dynamic earphone.
> If you talked into the earphone you had a "modulated osc" that
> broadcast to other radios.
> It was neat. I took it to the barber shop that all us kids used and
> showed it off on the barbers radio that was next to all the comic
> books. It could receive and send. It was one of those glory days.
> Rick, K1WYH
>
> On 3/29/2017 4:46 PM, baruchatta@... [regenrx] wrote:
>>
>> Does anyone have a working circuit for aRegen receiver using a
>> tickler coil and using only bipolar transistors (NPN or PNP) and not
>> any FETs like MFP102, etc.?
>>
>>
>> I have found lots of regens using tubes, or using FETs in the regen
>> stage. I am looking for a circuit that uses just bipolar and also
>> uses a tickler coil for feedback.
>>
>>
>> thanks
>>
>> Joe W3TTT
>>
>
>

27832. Re: [QRP-L] KITCHIN regen heard Radio Habana Cuba 6 Mhz

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-30 10:25:26 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27832 Message: 27832

Yes amigo Rob: D9B russian diodes are very good indeed. You may want to buy a big lot and then with a lot of patience test each of them to find the best ones...

Congratulations on your efforts to help young persons have the opportunity to learn about our wonderful hobby

73 and DX

Arnie Coro CO2KK

Host of Dxers Unlimited radio hobby show, twice weekly on the air via Radio Havana Cuba

On 30/03/17 01:38, Rob wrote:
> 2nd night ..... again hearing Habana broadcasting on 6 Mhz
>
> Playing with different air variable and polyvaricon capacitors.
> Concluded the boat anchor air cap works a lot better than standard
> polyvaricon.
> Sort of defeats the purpose of low cost design.
> http://www.learnmorsecode.com/regen/00kitreg05.jpg
> Swapped out the 1N34A ..... installed Russian D9B.
> D9B had nice audio.
>
> On 03/29/2017 11:15 PM, FRED BELGHAUS wrote:
>> I wonder if anyone here (besides me) has ever built a shortwave crystal
>> set? I built one about 15 years ago (don't remember where I got the
>> circuit), that easily copied Radio Havana and Voice of Free China's
>> transmitter somewhere in the Caribbean.
>>
>> If you haven't tried building one, they are a hoot. If you want to be
>> fancy, include a battery powered, amplified speaker. An old computer
>> speaker will work.
>>
>> 72,
>>
>> Fred W2AAB
>>
>> On Wed, Mar 29, 2017 at 10:58 PM, Bobby Drummond <alphak4ja@...>
>> wrote:
>>
>>> Great job, Rob! I've gotta' try building one, too.
>>>
>>> 73 de AK4JA
>>>

>>>
>>> On Wed, Mar 29, 2017 at 1:43 PM Brad Thompson
>>> <brad.thompson@...>
>>> wrote:
>>>
>>>> On 3/29/2017 1:46 PM, Bob Liesenfeld wrote:
>>>>> Gang,Always wondered how diode detectors like the one in this rig
>>>>> work
>>>> without a complete DC path for diode current (See 10nF cap in
>>>> series with
>>>> cathode).
>>>> Hello, Bob--
>>>>
>>>> My hunch is that the reverse-leakage current (which can be anywhere
>>>> from
>>>> 10 to 100 microamps max. at 10V reverse bias, according to a couple of
>>>> data sheets) provides a path to discharge the 0.01 uF cap that's in
>>>> series with it:
>>>>
>>>> http://www.learnmorsecode.com/regen/00regen.html
>>>>
>>>> 73--
>>>>
>>>> Brad AA1IP
>>>>
>>>>
>>>>
>>>>
>>>>
>>>>
>>>>
>>>>
>>>> ____
>>>> QRP-L mailing list
>>>> Home: http://mailman.qth.net/mailman/listinfo/qrp-l
>>>> Help: http://mailman.qth.net/mmfaq.htm
>>>> Post: mailto:QRP-L@...
>>>>
>>>> This list hosted by: http://www.qsl.net
>>>> Please help support this email list: http://www.qsl.net/donate.html
>>>> Message delivered to alphak4ja@...
>>>>
>>> ____
>>> QRP-L mailing list
>>> Home: http://mailman.qth.net/mailman/listinfo/qrp-l
>>> Help: http://mailman.qth.net/mmfaq.htm
>>> Post: mailto:QRP-L@...
>>>
>>> This list hosted by: http://www.qsl.net
>>> Please help support this email list: http://www.qsl.net/donate.html
>>> Message delivered to fbelghaus@...

>>>
>> _____
>> QRP-L mailing list
>> Home: http://mailman.qth.net/mailman/listinfo/qrp-l
>> Help: http://mailman.qth.net/mmfaq.htm
>> Post: mailto:QRP-L@...
>>
>> This list hosted by: http://www.qsl.net
>> Please help support this email list: http://www.qsl.net/donate.html
>> Message delivered to roomberg@...
>>
>
> _____
> QRP-L mailing list
> Home: http://mailman.qth.net/mailman/listinfo/qrp-l
> Help: http://mailman.qth.net/mmfaq.htm
> Post: mailto:QRP-L@...
>
> This list hosted by: http://www.qsl.net
> Please help support this email list: http://www.qsl.net/donate.html
> Message delivered to inforhc@...
>

27833. Re: [regenrx] looking for circuit Regen with tickler using only bipolar

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-30 12:42:41 UTC
From: baruchatta@...
Topic: 27828 Message: 27833

2N35 NPN Transistor Regen Circuit

Rick

Thanks for the tip. However, the 2n35 is a germanium transistor. Even though I do have a few of these (from my uncle Lenny K2AQM, SK who worked at Bell Labs for 35 years), I still am looking for a circuit using silicon such as 2n3904. This type I have literally hundreds.

Any other ideas?

thanks

Joe W3TTT

27834. Re: [regenrx] looking for circuit Regen with tickler using only bipolar

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-30 15:44:23 UTC
From: SHARKFINGUY@...
Topic: 27828 Message: 27834
Attachments: 1 described; binary payloads are missing from this source WARC

How about the realistic globe patrol diagram. It uses a tickler coil and base winding and the regen transistor is silicon. A 2n3904 should work here.

27835. Re: [regenrx] looking for circuit Regen with tickler using only bipolar [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-30 16:08:46 UTC
From: Jim Scott
Topic: 27835 Message: 27835
Attachments: 2 described; binary payloads are missing from this source WARC

I don't know if we are allowed to attach files, but I'll attempt it. If that doesn't work, I'll upload to a location and send a link.

I'm attaching two 2N3904 based regens. However, I'm partial to the one I created in 1994. It is what I call a "REFLEX REGEN" which makes the first transistor operate as a common base RF amp, then a common emitter audio amp! This is the perfect radio for someone too cheap to put three transistors in a box!

73,

Jim Scott
WB0IYC
Life Member ARRL
FISTS 15327
Joplin, MO EM27RC
http://www.wb0iyc.com

The whole universe is waiting...
http://www.jpl.nasa.gov/

-----Original Message-----
From: SHARKFINGUY@... [regenrx] [mailto:regenrx@yahoogroups.com]
Sent: Thursday, March 30, 2017 10:44 AM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] looking for circuit Regen with tickler using only bipolar [1 Attachment]

How about the realistic globe patrol diagram. It uses a tickler coil and base winding and the regen transistor is silicon. A 2n3904 should work here.

27836. Re: [regenrx] looking for circuit Regen with tickler using only bipolar [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-30 16:28:17 UTC
From: baruchatta@...
Topic: 27835 Message: 27836

Thanks Jim! The schematics came through fine. Great ideas. And yes, I probably fall in the category of "too cheap to use three transistors". Actually, I have the FETs on order, but it is taking a long time to arrive, so I thought I would use BJTs like the 100 2n3904s that I have in my parts box. Also, the circuit would need to match the Tampax Tube Two circuit. I just built the TTT and it is a great circuit. Worked right from the start. Oscillates nicely. and most of all, needs no tuning variable capacitor (talk about cheap). The rig tunes nicely without a cap. I wanted to build some more of the same. Unfortunately, it requires a MPF102 FET transistor in the first position. And I was ALL OUT of these. So, I did order some more from an eBay Chinese supplier, and I am waiting for delivery. But I thought that I would seek out a circuit that is similar, using a tickler coil, and using bipolar transistor in the first position. But the only circuits that I could find used FETs or even Germanium transistors. For some unknown reason, nobody wanted to use a (cheap and plentiful) BJT. Oh, I did try, for a few hours at least, but so far, no cigar. I want to get it to oscillate, at least. I must be doing something wrong, because why couldn't a BJT oscillate using a tickler?

The TTT circuit is available here: www.afelino.net/tt2.htm http://www.afelino.net/tt2.htm

How would you adopt that circuit for a bipolar transistor?

27837. Re: [regenrx] looking for circuit Regen with tickler using only bipolar

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-30 17:03:51 UTC
From: Jim Scott
Topic: 27828 Message: 27837

I have found that the 2N3904 is a great little silicon device for RF service. As for JFETs, the 2N5486 is a good solid replacement for the MPF102 and readily available.

I'll look at the circuit later on today and try to comment. Anyway, that little reflex regen is novel and will surprise you!

Later.
-Jim

It has been proven that...
Calculus and Alcohol don't mix.
So don't drink and derive.

-----Original Message-----
From: baruchatta@... [regenrx] [mailto:regenrx@yahoogroups.com]
Sent: Thursday, March 30, 2017 11:28 AM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] looking for circuit Regen with tickler using only bipolar

Thanks Jim!The schematics came through fine. Great ideas. And yes, I probably fall in the category of "too cheap to use three transistors". Actually, I have the FETs on order, but it is taking a long time to arrive, so I thought I would use BJTs like the 100 2n3904s that I have in my parts box. Also, the circuit would need to match the Tampax Tube Two circuit. I just built the TTT and it is a great circuit. Worked right from the start. Oscillates nicely. and most of all, needs no tuning variable capacitor (talk about cheap). The rig tunes nicely without a cap. I wanted to build some more of the same. Unfortunately, it requires a MPF102 FET transistor in the first position. And I was ALL OUT of these. So, I did order some more from an eBay Chinese supplier, and I am waiting for delivery. But I thought that I would seek out a circuit that is similar, using a tickler coil, and using bipolar transistor in the first position. But the only circuits that I could find used FETs or even Germanium transistors. For some unknown reason, nobody wanted to use a (cheap and plentiful) BJT. Oh, I did try, for a few hours at least, but so far, no cigar. I want to get it to oscillate, at least. I must be doing something wrong, because why couldn't a BJT oscillate using a tickler?

The TTT circuit is available here: www.afelino.net/tt2.htm

How would you adopt that circuit for a bipolar transistor?

27838. RE: [regenrx] looking for circuit Regen with tickler using only bipolar [2 Attachments]

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-30 19:05:51 UTC
From: Hubert Miller
Topic: 27835 Message: 27838

I have a question: have you used the reflex circuit on SW, and if so, how does it work in the osc mode for CW, SSB reception?
Reason i ask is, i read in one of R. Penfold’s books on small receiver projects, that his reflex circuit was less than ideal for these modes, but there was no explanation.
I invite anyone to comment on this question.

Re the second circuit, i received a note from Ramon Vargas saying he has dropped out of the groups due to pressures of his work. He did send me a 3x 2N3904 regen
with a Vackar – style tuning circuit. Maybe i’ll scan it an post it here.
-H

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Thursday, March 30, 2017 9:09 AM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] looking for circuit Regen with tickler using only bipolar [2 Attachments]

I don't know if we are allowed to attach files, but I'll attempt it. If that doesn't work, I'll upload to a location and send a link.

I'm attaching two 2N3904 based regens. However, I'm partial to the one I created in 1994. It is what I call a "REFLEX REGEN" which makes the first transistor operate as a common base RF amp, then a common emitter audio amp! This is the perfect radio for someone too cheap to put three transistors in a box!

73,

Jim Scott
WB0IYC
Life Member ARRL
FISTS 15327
Joplin, MO EM27RC
http://www.wb0iyc.com

27839. RE: [regenrx] looking for circuit Regen with tickler using only bipolar [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-30 19:11:05 UTC
From: Hubert Miller
Topic: 27828 Message: 27839

OH NO another example of the notorious “floating diode” !
-H

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Thursday, March 30, 2017 8:44 AM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] looking for circuit Regen with tickler using only bipolar [1 Attachment]

How about the realistic globe patrol diagram. It uses a tickler coil and base winding and the regen transistor is silicon. A 2n3904 should work here.

View attachments on the web<https://groups.yahoo.com/neo/groups/regenrx/attachments/429446000;_ylc=X3oDMTJyY2Jibm1zBF9TAzk3MzU5NzE0BGdycElkAzEzOTk2OTA3BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDYXR0YWNobWVudARzbGsDdmlld09uV2ViBHN0aW1lAzE0OTA4ODg2NjY->

_____
Posted by: SHARKFINGUY@aol.com<mailto:SHARKFINGUY@aol.com>

27840. Floating diode circuit

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-30 20:13:29 UTC
From: Hubert Miller
Topic: 27840 Message: 27840

The output - load capacity is not large enough to charge to the audio peaks and hold the charge over audio cycles,
So the output can fluctuate above and below the averaged steady carrier output level. If this were a power circuit,
like a light bulb for the load, the series isolating capacitor would limit the DC output current, but this is a high
impedance circuit, so this capacitor has minimal effect. The circuit doesn't depend on diode leakage current.
I was the other night looking at a 1990s kit schematic for a "TAMAR Electronics AM radio kit". In this circuit the
diode is totally isolated by capacitors before and after it. Leakage thru the diode has nowhere to go, so it clearly
can't be diode leakage that makes it work. If there's a problem with getting the circuit to work, i suggest it has to
do with the values of the series and load capacitors. This is the same message i delivered a year or two back.
-Hue

27841. How many turns for 40 meters coil for KITCHIN RCVR

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-31 02:10:03 UTC
From: Rob
Topic: 27841 Message: 27841

This project says do 8 turns then a tap then 4 turns.
Result was very good reception on 6Mhz
http://www.learnmorsecode.com/regen/00regen.html

Is there any documentation I can follow for turns counts to make
a 7Mhz CW receiver?

27842. Re: [regenrx] How many turns for 40 meters coil for KITCHIN RCVR

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-31 02:55:43 UTC
From: Brian Ford
Topic: 27841 Message: 27842

blockquote, div.yahoo_quoted { margin-left: 0 !important; border-left:1px #715FFA solid !important; padding-left:1ex !important; background-color:white !important; } That is what I wound the coil in my pow canteen RX circuit. I think it is pretty a common number.
Keith

Sent from Yahoo Mail for iPad

On Thursday, March 30, 2017, 21:10, Rob roomberg@... [regenrx] <regenrx@yahoogroups.com> wrote:

This project says do 8 turns then a tap then 4 turns.
Result was very good reception on 6Mhz
http://www.learnmorsecode.com/regen/00regen.html

Is there any documentation I can follow for turns counts to make
a 7Mhz CW receiver?

27843. Re: [regenrx] How many turns for 40 meters coil for KITCHIN RCVR

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-31 04:43:34 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27841 Message: 27843

Hola amigos: The tuned circuit for the regenerative detector provides lots of room for experimenting... For example you may want a 10 turns coild on a one inch chunk of PVC pipe, and provides taps at 5 and 3 turns...giving the opportunity of experimenting with the feedback tap... use 5, or use 3...

Also using a ferrite rod from a defunct AM Band transistor radio will make possible listening to the top end of that band, from around 1300 kiloHertz up and reaching well into the 160 meters amateur band, that is still providing good signals , but that soon will be quite a challenge when the summer thunderstorms season begins...

2N3904 's and 2N2222's work well .... also tested 2SC371/372, but the 2SC373 showed what too much gain will do... i.e. make the regeneration control very critical to set properly

73 and DX

Arnie Coro

CO2KK

Host of Dxers Unlimited radio hobby show on Radio Havana Cuba

On 30/03/17 22:55, Brian Ford kf4tap@... [regenrx] wrote:
>
>
> That is what I wound the coil in my pow canteen RX circuit. I think it
> is pretty a common number.
>
> Keith
>
>
> Sent from Yahoo Mail for iPad <https://yho.com/footer0>
>
> On Thursday, March 30, 2017, 21:10, Rob roomberg@... [regenrx]
> <regenrx@yahoogroups.com> wrote:
>
> This project says do 8 turns then a tap then 4 turns.
> Result was very good reception on 6Mhz
> http://www.learnmorsecode.com/regen/00regen.html
>
> Is there any documentation I can follow for turns counts to make
> a 7Mhz CW receiver?
>
>
>

>
>

27844. Re: [regenrx] How many turns for 40 meters coil for KITCHIN RCVR

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-31 05:14:57 UTC
From: Alvin Schmitt
Topic: 27841 Message: 27844

figure the inductance using L = 1/((2piF)^2C) then get an inductance meter and wind turns until you get that inductance. Alvin P. Schmitt

APSATRON LLC
P.O. Box 201Newport VA 24128-0201

1-888-730-6478
http://www.apsministries.org/

On Thursday, March 30, 2017 10:10 PM, "Rob roomberg@... [regenrx]" <regenrx@yahoogroups.com> wrote:

  This project says do 8 turns then a tap then 4 turns.
Result was very good reception on 6Mhz
http://www.learnmorsecode.com/regen/00regen.html

Is there any documentation I can follow for turns counts to make
a 7Mhz CW receiver?

27845. Re: [regenrx] looking for circuit Regen with tickler using only bipolar

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-31 05:15:45 UTC
From: Jim Scott
Topic: 27828 Message: 27845

Yes...

Toss the floating diode! The construction was poor, so worked in the 50's but they are better now.
73,

Jim Scott
WB0IYC
Life Member ARRL
FISTS 15327
Joplin, MO EM27RC
http://www.wb0iyc.com

The whole universe is waiting...
http://www.jpl.nasa.gov/
-----Original Message-----
From: Hubert Miller kargo_cult@... [regenrx] [mailto:regenrx@yahoogroups.com]
Sent: Thursday, March 30, 2017 02:11 PM
To: regenrx@yahoogroups.com
Subject: RE: [regenrx] looking for circuit Regen with tickler using only bipolar

OH NO another example of the notorious “floating diode” !
-H

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Thursday, March 30, 2017 8:44 AM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] looking for circuit Regen with tickler using only bipolar [1 Attachment]

How about the realistic globe patrol diagram. It uses a tickler coil and base winding and the regen transistor is silicon. A 2n3904 should work here.

View attachments on the web

Posted by: SHARKFINGUY@...

27846. Re: [regenrx] How many turns for 40 meters coil for KITCHIN RCVR

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-31 05:23:57 UTC
From: Rob
Topic: 27841 Message: 27846

http://www.learnmorsecode.com/regen/tankcalc.jpg

On 03/31/2017 01:14 AM, Alvin Schmitt schmitt_alvin@... [regenrx]
wrote:
> figure the inductance using L = 1/((2piF)^2C) then get an inductance
> meter and wind turns until you get that inductance.
> Alvin P. Schmitt
>
> APSATRON LLC
> P.O. Box 201
> Newport VA 24128-0201
>
> 1-888-730-6478
>
> http://www.apsministries.org/ <http://www.apsministries%0A%20.org/>
>
>
> On Thursday, March 30, 2017 10:10 PM, "Rob roomberg@... [regenrx]"
> <regenrx@yahoogroups.com> wrote:
>
>
> This project says do 8 turns then a tap then 4 turns.
> Result was very good reception on 6Mhz
> http://www.learnmorsecode.com/regen/00regen.html
>
> Is there any documentation I can follow for turns counts to make
> a 7Mhz CW receiver?
>
>
>
>
>

27847. RE: [regenrx] looking for circuit Regen with tickler using only bipolar

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-31 05:18:31 UTC
From: Hubert Miller
Topic: 27828 Message: 27847

It still works in 2017.
The latest kit i saw with it was the TAMAR kit, around 2003. It did not
“not work”, and it did work well.
-Hue

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Thursday, March 30, 2017 10:16 PM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] looking for circuit Regen with tickler using only bipolar

Yes...

Toss the floating diode! The construction was poor, so worked in the 50's but they are better now.
73,

Jim Scott
WB0IYC
Life Member ARRL
FISTS 15327
Joplin, MO EM27RC
http://www.wb0iyc.com

The whole universe is waiting...
http://www.jpl.nasa.gov/

-----Original Message-----
From: Hubert Miller kargo_cult@msn.com<mailto:kargo_cult@msn.com> [regenrx]
[mailto:regenrx@yahoogroups.com]
Sent: Thursday, March 30, 2017 02:11 PM
To: regenrx@yahoogroups.com<mailto:regenrx@yahoogroups.com>
Subject: RE: [regenrx] looking for circuit Regen with tickler using only bipolar

OH NO another example of the notorious “floating diode” !
-H

From: regenrx@yahoogroups.com<mailto:regenrx@yahoogroups.com>
[mailto:regenrx@yahoogroups.com]
Sent: Thursday, March 30, 2017 8:44 AM
To: regenrx@yahoogroups.com<mailto:regenrx@yahoogroups.com>
Subject: Re: [regenrx] looking for circuit Regen with tickler using only bipolar [1 Attachment]

How about the realistic globe patrol diagram. It uses a tickler coil and base winding and the regen transistor is silicon. A 2n3904 should work here.
View attachments on the web<https://groups.yahoo.com/neo/groups/regenrx/attachments/429446000;_ylc=X3oDMTJyY2Jibm1zBF9TAzk3MzU5NzE0BGdycElkAzEzOTk2OTA3BGdycHNwSWQDMTcwNTA2MzEwOARzZ

WMDYXR0YWNobWVudARzbGsDdmlld09uV2ViBHN0aW1lAzE0OTA4ODg2NjY->

_____
Posted by: SHARKFINGUY@aol.com<mailto:SHARKFINGUY@aol.com>

27848. Is the number of tuns including all the coil or just some of it?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-31 07:22:30 UTC
From: Rob
Topic: 27841 Message: 27848

Along the lines of calculating the inductance then winding the coil and measuring with a meter......

this circuit calls for 8 turns then tap then another 4 turns of wire.

IS THE 8 TURN PORTION mated with the 250pF variable capacitor the tank LC to calculate?
OR
does the 4 turns after the tap get included in the inductance?

Noting the picture shows white wire 8 turns..then the tap ..then 4 turns of black wire.

.....so for a 100pF capacitor.... for 7Mhz......
25,330.3/(7*7*100)=5.17 microHenries

so does that mean the WHITE turns should be 5.17 microHenries
or all ..WHITE and BLACK turns should be 5.17 microHenries
??

http://www.learnmorsecode.com/regen/00kitreg05.jpg

http://www.learnmorsecode.com/regen/00regen.html

http://www.learnmorsecode.com/regen/tankcalc.jpg
>
>
>
> On 03/31/2017 01:14 AM, Alvin Schmitt schmitt_alvin@...
> [regenrx] wrote:
>> figure the inductance using L = 1/((2piF)^2C) then get an inductance
>> meter and wind turns until you get that inductance.
>> Alvin P. Schmitt

27849. Re: Kitchin 3 fet regen

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-31 15:57:17 UTC
From: nzerowva@...
Topic: 27810 Message: 27849

FET regens are fun, but the need to run a source resistor severely limits how much audio you get out of the stage. Running tons of audio gain to make up for the loss can get squirrely. If you desire a regen for SSB and CW, you can achieve enough audio out of two transistors to drive a speaker to usable levels. Or run the detector straight into an LM380 for even better speaker performance.

It is all about getting rid of the r/c in the source and grounding it directly. Feed the gate a negative voltage through the "gate leak resistor". Couple the tank to the gate with only 2pf or so and you will see huge improvements in audio and SSB will start to have the clarity of a direct conversion receiver.

This technique will not do so well with AM, but for a SSB/CW rig it brings a regen receiver into a whole new world that can actually be suitable for a main receiver.

27850. Transistorizing Antique Regenerative Radio's

Yahoo group: regenrx (2016 — 2017)
Date: 2017-03-31 18:21:10 UTC
From: Jordan Dobrikin
Topic: 27850 Message: 27850

Hi
I am looking for advice, comment and assistance in transitorizing Antique Detectors.
RCA Radiola IIIA; Westinghouse RADA
73 de Jordan ve7jjd

http://www.radiomuseum.org/r/rca_rc.html
Westinghouse RC + RA+DA
http://www.radiomuseum.org/r/rca_rc.html
Westinghouse RC ch= RA+DA, RCA (RCA Victor Co. Inc.); New York (NY)
Country: United States of America (USA)
Manufacturer / Brand: RCA (RCA Victor Co. Inc.); New York (NY)
Alternative name; RCA Manufacturing Victor Talking Machine
Year: 1921 Category: Broadcast Receiver - or past WW2 Tuner
Valves / Tubes 3: UV200 or UV201 UV201 UV201
*Reception principle to an article TRF with regeneration *
Tuned circuits 1 AM circuit(s); Wave bands Broadcast only (MW).
Power type and voltage: Storage and/or dry batteries
Loudspeaker: This model requires external speaker(s).
Material: Wooden case
Shape: Tablemodel, Box - most often with Lid (NOT slant panel).
Dimensions (WHD) 13.5 x 9.5 x 8.5 inch / 343 x 241 x 216 mm
Notes
RC = RA and DA in a single common box. Tunes 180 to 700 m.
Using the optional Long Wave Load Coil CB the government time signals in the range of 1800 to 2800 m could be tuned in.
Price in first year of sale 133.00 $
External source of data Ernst Erb
Source of data Radio Collector`sGuide 1921-1932 (Collectors)
Mentioned in The Radio Collector's Directory and Price Guide 1921 - 1965
Literature/Schematics (1) Radio Enters the Home, 1922
Literature/Schematics (2) Robertson Cataract, catalog 1922/23
http://www.radiomuseum.org/r/rca_rc.html

Radiola IIIA Radio Museum
http://www.radiomuseum.org/r/rca_radiola_iiia_3a.html
Radiola III A AR-802 Type RL; RCA RCA Victor Co. (ID = 618552) Radio
RCA RCA Victor Co.: Radiola III A AR-802 Type RL [Radio] ID = 618552 873x700
For model Radiola III A (3A, IIIA) AR-802 Type RL, RCA (RCA Victor Co. Inc.); New York (NY)
Country: United States of America (USA)
Manufacturer/Brand: RCA (RCA Victor Co. Inc.); New York (NY) alternative name RCA Victor Talking Machine

Year: 1924 perfect model Category: Broadcast Receiver or past WW2 Tuner
Valves / Tubes 4: WD11 WD11 WD11 WD11
Reception principle TRF with reaction (regenerative); 2 AF stage(s)
Tuned circuits 1 AM circuit(s)
Wave bands Broadcast only (MW).
Power type and voltage Dry Batteries
Loudspeaker For headphones or amp.
From Radiomuseum.org
Model: Radiola III A AR-802 Type RL - RCA RCA Victor Co. Inc.; New
Material Wooden case, TUBES VISIBLE.
Shape: Tablemodel, with any shape - general.
Dimensions (WHD) 300 x 150 x 170 mm / 11.8 x 5.9 x 6.7 inch
Notes
Battery setup: "A" battery for filament heating: Four or six 1.5 volt dry
cells connected in parallel. Good batteries are recommended, having
approximate dimensions of 2.5 inches diameter by 6 inches high. A two volt
(one cell, lead type) storage battery may be used if desired.
"B" battery for supplying power to the plate circuits, consisting either of
four 22.5 volt blocks connected in series. Two 45 volt plate batteries
instead of four 22.5 volt blocks may be used if desired.
For "C" one 4.5 volt Negative Grid Bias Battery.
Push-pull output. The WD11 were often replaced by UX199, using adaptors. 60
mA from 3 V made only 0.18 W per UX199, while the WD11 drew 0.25 A from a
1.5 V battery = 0.375 W, practically twice as much. The price was the same:
6.50$.
Price in first year of sale $65.00
External source of data Ernst Erb
Source of data Radio Collector`s Guide 1921-1932 (Collectors)
Circuit diagram reference Rider's Perpetual, Volume 1 = 1931/1934 (for
1919-1931)
Literature/Schematics (1) Radio Manufacturers of the 1920's, Vol. 3 (RCA,
Radiola III-A, Handbook)
Literature/Schematics (2) Radio Broadcast, Mar. 1924. p. 443
All listed radios etc. from RCA (RCA Victor Co. Inc.); New York (NY)
Here you find 1924 RCA Radiola III radio receiver with two WD-11 display
tubes.
$76.00
ANTIQUE RADIO'S VALUE GUIDE COLLECTOR BOOK Zenith RCA Emerson Philco
Philips
About Radiomuseum.org | Contact | Press | Privacy | Copyright | Logos |
send2friend

--
73 Jordan VE7JJD

27851. RCA AR-8501 1937

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-01 03:38:07 UTC
From: Hubert Miller
Topic: 27851 Message: 27851

I just received a manual copy i bought from 'Vintage Manuals' for my RCA AR-8501, 1937 4-tube ships regen.
It did kind of surprise me that RCA wasn't thinking more along the lines of superhets in 1937, but i suppose
the circuit worked, and it would be easier for the radioman to repair at sea, if he or she had to. The receiver
uses 2.5 volt tubes in a very conventional circuit, tickler coil with variable cap regen control. Coils are only
provided for 3 bands, 5-18 MHz. There is no audio control, only a gain control in the RF amp. Kind of strange
that it didn't cover any lower bands, like the 2-3 MHz marine band or the 500 kHz range.
-H

27852. Re: RCA AR-8501 1937

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-01 15:53:56 UTC
From: les.au49@...
Topic: 27851 Message: 27852

Hello Hue,

You wrote about your surprise about RCA using the TRF regen late into the 30's.
I see a parallel situation with SOE and the Paraset in WWII.

In the case of the Paraset I decided two things. First, the designer placed great value on the idea of DIY repair. Very important when you can't take the set to the local (now vanished) radio repair shop. The key element in the design was local knowledge.

Second: We look back with the advantage of seeing the broad sweep of history. After WWII the SW bands were packed with stations - but what about 1937, 38, 39 ....? (I don't know, I wasn't there.) But that's my guess. So the lower selectivity of the TRF wouldn't be such a problem.

Then there's the problem (and cost) of two (or 3 gang) tuning caps.

Another interesting (resistance) radio set is the Polish Peepshtok. (or Pipschtok). This design is a 2 tube regen superhet - 6K8 frequency changer followed by 6K7 (or 6SK7) detector. When ARRL published a 2 tube design (in the 1941 handbook) it used a triode detector, followed by a triode AF stage to design the 'phones.

Looking at the Pipschtok again, it has a conventional regen control - pot in the screen grid of a pentode. I wonder how the designer felt about the comparatively low "Z" load to the detector? Generally pentodes look for a much higher "Z" load. I guess the design used only 2 tubes (in the receiver) to conserve battery power. If you're running from battery power in the forest, every mA of filament current is a drain on battery life.

But now I'm "off" your topic - the 4 tube RCA ship's radio.

Les

27853. RE: [regenrx] Re: RCA AR-8501 1937

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-01 18:09:32 UTC
From: Hubert Miller
Topic: 27851 Message: 27853

I think your items are all "on-topic".
I read Pat Hawker, who operated a home station communicating with agent "outstations", saying that in WW2 the HF bands sounded like "contest night" on the hambands in later years.
Contrast that with pre-war or post-war. In wartime you had a large part of the male population working outside the normal economy, and radio was the main means of communications
for all levels of communications. So you had large bases, small bases, weather observers, weather observation planes, and so many others, making use of the frequencies.
However you are right about the marine bands pre and post-war. They would be busy, but disciplined, so a regen could function well in that environment.
The AR-8501 does have an RF stage and a two-gang tuning cap. I would hazard a rash statement and venture that all U.S. commercial product, communications-grade regens did not
have separate RF and detector tuning knobs (separate tuning capacitors.)

I noticed the schematics for the AR-8501 have in the name block (design, approval, etc.) the date 1934. The manual is dated 1936 and 1937, so maybe the manual was improved or updated.
Like some of the early manuals, there are items that seem offhand or unprofessional. For instance the tuning charts have hand-written (in the original) captions, not typed captions.

I noticed the grid resistor for the type 58 detector is 5M ohm. That's higher than most circuits work with.
When i looked at the schematic and saw that the output tube type 56 was the only one different, i thought, they could have wired a 58 as a triode, then the receiver would have used four
type 58 only, and that would have simplified repair parts stock.

As far as input impedance, i don't think the difference in a grid leak biased detector, the difference between a pentode and triode will be

Subject: [regenrx] Re: RCA AR-8501 1937

Hello Hue,

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I see a parallel situation with SOE and the Paraset in WWII.

In the case of the Paraset I decided two things. First, the designer placed great value on the idea of DIY repair. Very important when you can't take the set to the local (now vanished) radio repair shop. The key element in the design was local knowledge.

Second: We look back with the advantage of seeing the broad sweep of history. After WWII the SW bands were packed with stations - but what about 1937, 38, 39 ....? (I don't know, I wasn't there.) But that's my guess. So the lower selectivity of the TRF wouldn't be

such a problem.

Then there's the problem (and cost) of two (or 3 gang) tuning caps.

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Looking at the Pipschtok again, it has a conventional regen control - pot in the screen grid of a pentode. I wonder how the designer felt about the comparatively low "Z" load to the detector? Generally pentodes look for a much higher "Z" load. I guess the design used only 2 tubes (in the receiver) to conserve battery power. If you're running from battery power in the forest, every mA of filament current is a drain on battery life.

But now I'm "off" your topic - the 4 tube RCA ship's radio.

Les

27854. RE: [regenrx] Re: RCA AR-8501 1937

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-01 18:13:28 UTC
From: Hubert Miller
Topic: 27851 Message: 27854

(To continue an email prematurely sent thanks to notorious Toshiba track pad quirks.)

As far as input impedance, i don't think the difference in a grid leak biased detector, the difference between a pentode and triode, at these frequencies, will be large enough to amount to anything you have to take into consideration.
-Hue

27855. Re: Kitchin 3 fet regen

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-01 19:44:26 UTC
From: SHARKFINGUY@...
Topic: 27810 Message: 27855

Thanks for the reply. I will try that on my next regen. Perhaps if I use a diode in the source it will provide the negative bias. depending on the fet I may need 2 diodes. So far the radio is performing well. I added a fixed capacitance across the coil and added a 60 pf capacitor in series with the tuning cap. This narrowed the tuning range. It now tunes from 6.8 mhz to 8.2 mhz. Now the 40 meter band occupies a large slice of the dial. Yesterday I heard a station from Spain on ssb.

27856. Re: RCA AR-8501 1937

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-02 07:43:00 UTC
From: les.au49@...
Topic: 27851 Message: 27856

Hello Hue,

I read the description (by Pat Hawker) of SW band conditions in WWII. Fascinating.

The idea that the bands were packed with signals makes me even more interested in the use of the Paraset for "agents" in France. Looking at a map - I figure the sets were operating over a distance of 600 to 1000km (or 1500km to Poland). For a two 'tube' set working in a crowded band - (considering the consequences of failed communication) - they either had very skilled operators or good sets. Or both.

But the Poles used a different set - at least early in the war they used this "thing" called the "A" series (also known as the Pipzstok). As I wrote before: 6K8 converter, 6SJ7 or 6J7 detector and 6L6 MOPA. I have only seen this set mentioned a few times. I would be delighted to see a circuit. (Anyone??) One day I will build a set of comparable functionality. Not a copy - just a regen. superhet with the detector at 1700kHz. 12K8 + 12SL7 (not 12SN7. The 12SN7 is rather like the 12AU7. The 12SL7 is rather like the 12AT7.) Plus (god forgive me) - a solid state AF back end. (Will you forgive me, Hue? Yes? Yes? I hope so.) I hope to build this on a strong chassis with good quality capacitor. (I have one from a BC-221. I hope you approve, Hue!)

On the topic of difference in operating impedance. The detector (in the Polish set) was a 6SJ7, and it fed headphones directly. My point wasn't the input "Z". My point was the best plate load for the pentode detector. Pentodes always demand a higher "Z" than triodes, and in this case the headphones (maybe 4k or 8k ohms) were in the plate circuit of the 6SJ7. I would think a 50 or 100k load would suit the pentode better.

I have never measured the inductance of high "Z" headphones, but if their inductance was 1 Henry then that represents 6k ohms at 1000Hz. (Has anyone measured the inductance?)

To go in a slightly different direction: I read that the 6V6 makes a very functional regen detector. And I note that THIS beam tetrode drives a (comparatively) low "Z" load. Say 5 to 10k ohms. It would be very interesting to see a 2 tube regen superhet using a 12K8 and 12V6. (or 12K8 and 12A6. Metal - of course!) I would like to compare two different sets - one using a 12SJ7 detector and the other using a 12A6.

Remember - if you have the circuit for a Pipzstok - write to me!

Les

27857. Re: Kitchin 3 fet regen

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-02 10:34:19 UTC
From: b_weeber@...
Topic: 27810 Message: 27857

Hello Stephen

** Perhaps if I use a diode in the source it will provide the negative bias.
** depending on the fet I may need 2 diodes.

You can use a green LED. Then in the same time you get an indication, if current is flowing.
http://theradioboard.com/rb/viewtopic.php?t=6069
http://theradioboard.com/rb/viewtopic.php?t=6069

Bernd

27858. Re: RCA AR-8501 1937

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-02 15:55:10 UTC
From: deadgoose@...
Topic: 27851 Message: 27858

FWIIW category -- I was born in 1938, and vividly remember hearing my father listen to SW on a nice Scott receiver.

As to tubes, I believe the first AC sets -- think stuff like Philco "Cathedral" set -- used the 2.5 volt heaters. Those were in general use through the 1930s until the octal 6.3 volt tubes came into use just prior to WW2. There were a few things like the 6E5 and 6U5 "magic eye" tubes that used the old 6 pin configurations. #80 rectifier as well. The #80 was a 5 volt heater.

As to batteries, etc., my Hallicrafters S20R, pre-ww2, I believe, use a #80 4 pin rectifier. There was an octal jumper plug on the back that could be removed so that batteries could be fitted. The radio was broad as the proverbial barn door, so I fitted it with a Heathkit "Q" multiplier. Also there were provisions for an S meter -- just the AGC line, so there was room in the Q multiplier for a dual triode (12AU7, or the like), balancing pot, and a small meter. Served me well for many years until I got some ARC-5 receivers and a BC-348.

I do not recall any commercial regenerative receivers in that era, though I built quite a few on them from "Radio for the Millions."

It is my impression that using existing technology and production facilities was paramount to the war effort. My dad was born in 1898, so was ultimately elegible for the draft, but was not called up. Thank my dad for brass plated door knobs -- DuPont unit he was with developed the brass plating technique -- we were short of copper alloys for ammunition in that era, and there was a push to develop a brass plating technique for steel. I remember playing with .50 cal. machine gun shell casings that were used in the experiments.

Most up scale console radios of that era had a SW band or two, in addition to the usual MW band. Remember listening the BBC before going to church in the mornings. We has a mast on our garage and a long wire SWL antenna fitted to it. I hooked up a Model T spark coil to it and took out every radio for blocks around...

That's my story, and I'm sticking to it..

73 /paul W3FIS

27859. Re: [regenrx] Re: RCA AR-8501 1937

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-02 18:09:25 UTC
From: Brian Ford
Topic: 27851 Message: 27859

blockquote, div.yahoo_quoted { margin-left: 0 !important; border-left:1px #715FFA solid !important; padding-left:1ex !important; background-color:white !important; } There is the 43 handbook a RX that uses a 6k8 and one other tube, possibly the 6j7, I think it was called the two tube regen heterodyne
Keith

Sent from Yahoo Mail for iPad

On Saturday, April 1, 2017, 10:54, les.au49@... [regenrx] <regenrx@yahoogroups.com> wrote:

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But now I'm "off" your topic - the 4 tube RCA ship's radio.

Les

27860. RE: [regenrx] Re: RCA AR-8501 1937

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-02 18:20:54 UTC
From: Hubert Miller
Topic: 27851 Message: 27860

Okay, Les, output impedance concern makes more sense and i understand what you were talking about. Yes, a pentode detector to a headphone almost seems to me like a mistake, but it was done,
and plenty of the published magazine projects did the same thing, altho as many others wired the pentode as a triode. The highest impedance magnetic headphones i have seen were around 12,000
ohm.
I had never heard of the Pip radio before. The only Polish sets i am familiar with were something like the AR-11 and AP-2 (my type numbers may be wrong) which were more advanced sets and
equal to anything produced anywhere else. I used to have a British radio magazine from the 1950s that had an ad for these Polish agent radios as war-surplus bargains. Now they all fetch $$$$$
prices. Didn't the British set use a combination superhet - regen detector also?
If you want to read a first-hand account of the resistance in Poland actually using such sets while trying to elude the Gestapo, there's a book titled "Fighting Warsaw" you can look up. It does not
give any description of the radios they were using, but the accounts are gripping and scary.
Just as a sidenote, it looks to me that in the Pacific area, no straight regenerative receivers were used by resistance groups. Maybe that was because due to it being not a question of hiding out
in cities, so the radios being of small size was not such a concern. Also it occurs to me, maybe the operators could not be counted on to be as well trained. Also a different communications system
was used, where small stations of just a few watts reported to a central station of higher power, which collected information and sent it on to Australia. (book reference, and also recommended:
"You're No Good To Me Dead".)
I do have a agent set from Europe, with a 3 tube regen receiver, and do want to put it on the air, but that still has to wait on other priorities. I was thinking that as there's a ham radio on-air event
called "Straight Key Night", maybe there could also be one called "Spy Key Night".
Also as a sidenote, there was a U.S. Navy radio of WW2 years that used a 3-tube regen, all 3S4 tubes, radio type CMS. No one really knows what it was intended for; no documentation or accounts
survive. My guess was that it was intended for the Philippine resistance but was rejected by the Navy in favor of other radios. This radio i think uses a 3S4 in the output but wired as a triode.
If you google "CMS radio" you can find some articles and photos.
-H

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I read the description (by Pat Hawker) of SW band conditions in WWII. Fascinating.

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Remember - if you have the circuit for a Pipzstok - write to me!

Les

27861. RE: [regenrx] Re: RCA AR-8501 1937

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-02 18:27:07 UTC
From: Hubert Miller
Topic: 27851 Message: 27861

I like that. With high quality IF transformer and IF in the 500 kHz area, this would knock down most of the regen's problems with nearby signals.
-H

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Sunday, April 2, 2017 11:09 AM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Re: RCA AR-8501 1937

There is the 43 handbook a RX that uses a 6k8 and one other tube, possibly the 6j7, I think it was called the two tube regen heterodyne
Keith

27862. Re: [regenrx] Re: RCA AR-8501 1937

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-02 18:47:32 UTC
From: Brian Ford
Topic: 27851 Message: 27862

blockquote, div.yahoo_quoted { margin-left: 0 !important; border-left:1px #715FFA solid !important; padding-left:1ex !important; background-color:white !important; } I wish I still the 43 hb, I would be interested in building that circuit.
Keith

Sent from Yahoo Mail for iPad

On Sunday, April 2, 2017, 13:27, Hubert Miller kargo_cult@... [regenrx] <regenrx@yahoogroups.com> wrote:

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Keith

27863. Re: RCA AR-8501 1937

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-02 20:19:20 UTC
From: b_weeber@...
Topic: 27851 Message: 27863

NELKA PIPSZTOK Polish A2 SPY SET 1942
https://www.youtube.com/watch?v=CsL7ekFLPGs https://www.youtube.com/watch?v=CsL7ekFLPGs
https://www.youtube.com/watch?v=nYSaIfOOEm8 https://www.youtube.com/watch?v=nYSaIfOOEm8

This is a B-Type. No regeneration, but a bfo for cw reception:
http://www.cryptomuseum.com/spy/bp3/index.htm
http://www.cryptomuseum.com/spy/bp3/index.htm
http://www.cryptomuseum.com/spy/bp5/index.htm
http://www.cryptomuseum.com/spy/bp5/index.htm

Unfortunately until now i was not able to find a Pipsztok A circuit diagram as well.

27864. Re: RCA AR-8501 1937

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-02 21:07:11 UTC
From: b_weeber@...
Topic: 27851 Message: 27864

Seems, on this website is the A1 circuit diagram:
http://sp2put.utp.edu.pl/radioelektronicy/heftman_t.htm
http://sp2put.utp.edu.pl/radioelektronicy/heftman_t.htm

Further down there is also an AP5 circuit, which contains an additional if stage, then followed by the regenerative detector.

27865. Re: [regenrx] Re: Kitchin 3 fet regen

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-02 22:59:25 UTC
From: Doug Hancock
Topic: 27810 Message: 27865

A green LED gets you very close to the proper bias. It will work good, although you lose some strong signal handling capability. There is something about taking the source directly to ground and feeding the FET a stiff bias that makes it handle strong signals the best.

On Sunday, April 2, 2017 5:34 AM, "b_weeber@... [regenrx]" <regenrx@yahoogroups.com> wrote:

  Hello Stephen

** Perhaps if I use a diode in the source it will provide the negative bias.
** depending on the fet I may need 2 diodes.

You can use a green LED. Then in the same time you get an indication, if current is flowing.
http://theradioboard.com/rb/viewtopic.php?t=6069

Bernd

27866. wire Fahnestock clips

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-04 14:04:33 UTC
From: Rob
Topic: 27866 Message: 27866

I was attempting to bend a paper clip into a Fahnestock clip shape:
http://www.learnmorsecode.com/regen/fahnestockclip.jpg

and was surprised to find the paper clip was made of an insulated wire:
http://www.learnmorsecode.com/regen/paperclip.jpg

So that got me thinking this is good to know.... to have insulated paper clips...
to be used in the future as insulated rigid wire.... perhaps for buttons...switches....
band selector slides.

27867. Can a regency Rx be integrated into a transceiver or matched to a transmitter.

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-04 22:40:54 UTC
From: Ottavio Caruso
Topic: 27867 Message: 27867

Hi all,

I was looking to build a simple and cheap CW transceiver and I've noticed that the receiver part is usually either a direct conversion or a rudimentary superhet.

This makes me wonder if it technically possible, or even desirable, to use a regency to receive and a simple unmodulated carrier to transmit.

Or maybe I'm not making sense at all.

What's your view on the topic?

Thanks

27868. fun with resonant tank circuits

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-05 03:40:35 UTC
From: Rob
Topic: 27868 Message: 27868

Having fun with resonant tank circuits.... needed a tapped coil to play:
http://www.learnmorsecode.com/regen/coiltaps.jpg
http://www.learnmorsecode.com/regen/00regen.html

27869. Re: Can a regency Rx be integrated into a transceiver or matched to a tr

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-05 12:30:39 UTC
From: Paul Ross
Topic: 27869 Message: 27869

There is the classic Paraset from WW2. A modern version is the Bayou Jumper from 4SQRP.COM. Check that you. Great radio, abut 80 as a kit -- you provide the case. Crystal controlled. 5 watts.

73 /Paul W3FIS

Sent from my iPad

27870. Re: [regenrx] Re: Can a regen Rx be integrated into a transceiver or matched to a tr

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-05 12:49:14 UTC
From: Ottavio Caruso
Topic: 27870 Message: 27870

On Wednesday, 5 April 2017, Paul Ross deadgoose@... [regenrx] <
regenrx@yahoogroups.com> wrote:

>
>
> There is the classic Paraset from WW2. A modern version is the Bayou
> Jumper from 4SQRP.COM. Check that you. Great radio, abut 80 as a kit --
> you provide the case. Crystal controlled. 5 watts.
>
>
>
Thanks Paul. I'll check on that.

I'm also interested in the theory behind matching transmitters and
receivers (maybe we're going off topic here).

For example the regenerative receiver will have its tuning section. How do
you match that with a transmitter?

Plus the regen (just like a direct conversion, if I'm not wrong) will have
to be tuned to one of the cw sidebands to receive correctly. Therefore
there will be an offset with the transmitter.

How do I handle that?

In other words, assume I have a regen that covers, say, the 40m portion of
CW and likewise a transmitter covering the same band, how can I make sure
that:

a) they use the same antenna but not at the same time, and

b) they are synchronised so that the transmit frequency is the same as the
nominal receiving frequency (not the sideband).

If this is too off topic, please feel free to point me to other resources.

Thanks

Ottavio

>
>

27871. Re: [regenrx] fun with resonant tank circuits

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-05 14:19:46 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27868 Message: 27871

Dear amigo Rob and list members:

Beautiful coil shown in the photo. For us lacking inductance measuring instrumentation.... could you please pass along a description of the coil in the photo... form diameter, wire used and the actual inductance at each tap !

It would be nice to wind a coil on a ferrite bar in order to test the regenerative radio on the AM medium wave broadcast band... IMHO it will probably be a very good performer on that frequency range !!!

Anyone on the list has build the 3 FET Kitchin regenerative ?

73 and DX from sunny >La Habana Cuba

enjoying beautiful weather but poor HF bands propagation today

On 04/04/17 23:40, Rob roomberg@... [regenrx] wrote:
>
>
> Having fun with resonant tank circuits.... needed a tapped coil to play:
> http://www.learnmorsecode.com/regen/coiltaps.jpg
> http://www.learnmorsecode.com/regen/00regen.html
>
>
>

27872. Re: [regenrx] fun with resonant tank circuits

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-05 15:47:01 UTC
From: Rob
Topic: 27868 Message: 27872

Form is a 1 inch pill bottle.
Wire is 28 Gauge.
Taps are every 4 turns.
It was just for experimental purposes.
I played with it a little and heard Radio Havana Cuba last night.
My meter showed 2 to 43 microhenries.
With 25 microhenries near the middle of the coil.

I was hoping to get a vast array of band selection but I did not.
I was able to receive Radio Havana Cuba with the taps at both ends
and also when I tapped at shorter coil counts... 4 8 12 16 24
and combinations to shorten the two sides of the coil.

On 04/05/2017 10:19 AM, 'Prof. Arnaldo Coro Antich' coro@...
[regenrx] wrote:
>
> Dear amigo Rob and list members:
>
> Beautiful coil shown in the photo. For us lacking inductance measuring
> instrumentation.... could you please pass along a description of the
> coil in the photo... form diameter, wire used and the actual
> inductance at each tap !
>
> It would be nice to wind a coil on a ferrite bar in order to test the
> regenerative radio on the AM medium wave broadcast band... IMHO it
> will probably be a very good performer on that frequency range !!!
>
> Anyone on the list has build the 3 FET Kitchin regenerative ?
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> 73 and DX from sunny >La Habana Cuba
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> enjoying beautiful weather but poor HF bands propagation today
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>
> On 04/04/17 23:40, Rob roomberg@... [regenrx] wrote:
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>> Having fun with resonant tank circuits.... needed a tapped coil to play:
>> http://www.learnmorsecode.com/regen/coiltaps.jpg
>> http://www.learnmorsecode.com/regen/00regen.html
>>
>>
>
>

27873. Re: [regenrx] Re: Can a regen Rx be integrated into a transceiver or matched to a tr

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-05 16:35:21 UTC
From: dulmagedon@...
Topic: 27870 Message: 27873
Attachments: 1 described; binary payloads are missing from this source WARC

This is the last regen/transceiver I built. No 3 for here. I used hartley circuit for both TX and RX and kept them as identical as possible. Both are slug tuned as well. They are tuned by one control a dal gang variable cap BUT I removed on plate from the Rx side and added a small variable with approx the same value plus a wee bit to the rx side n parallel. As we know often our intended victim is not exactly on freq anyway so we need to be able to QSY the Rx without bothering the TX. By setting the slugs on freq with the small bands pread rx cap in the middle I can go above and below my Tx signal looking for my contact or correcting minor tracking errors.
The main tube is a double triode. I can never remember the number (ECL 832?) It is a dissimilar dual triode sort of like one half 12au7 (tx side) and one half 12ax7(RX side) giving good power on Tx but good sensitivity and reaction on RX. I added the 6aq5 Audio amp but really dont use a speaker on it so could have saved the effort.. It works pretty good and I enjoy having it on Air. Tis my own design but it was inspired by the Weskit BN-1. Although any relation is similar.
donVE3LYX

27874. Re: [regenrx] fun with resonant tank circuits

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-05 17:21:05 UTC
From: Rob
Topic: 27868 Message: 27874

Perhaps I should revisit:
http://www.learnmorsecode.com/help/rfcoilandferrite.html

On 04/05/2017 11:47 AM, Rob roomberg@... [regenrx] wrote:
>
> Form is a 1 inch pill bottle.
> Wire is 28 Gauge.
> Taps are every 4 turns.
> It was just for experimental purposes.
> I played with it a little and heard Radio Havana Cuba last night.
> My meter showed 2 to 43 microhenries.
> With 25 microhenries near the middle of the coil.
>
> I was hoping to get a vast array of band selection but I did not.
> I was able to receive Radio Havana Cuba with the taps at both ends
> and also when I tapped at shorter coil counts... 4 8 12 16 24
> and combinations to shorten the two sides of the coil.
>
>
>
>
> On 04/05/2017 10:19 AM, 'Prof. Arnaldo Coro Antich' coro@...
> [regenrx] wrote:
>>
>> Dear amigo Rob and list members:
>>
>> Beautiful coil shown in the photo. For us lacking inductance
>> measuring instrumentation.... could you please pass along a
>> description of the coil in the photo... form diameter, wire used and
>> the actual inductance at each tap !
>>
>> It would be nice to wind a coil on a ferrite bar in order to test the
>> regenerative radio on the AM medium wave broadcast band... IMHO it
>> will probably be a very good performer on that frequency range !!!
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>> Anyone on the list has build the 3 FET Kitchin regenerative ?
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>> 73 and DX from sunny >La Habana Cuba
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>> On 04/04/17 23:40, Rob roomberg@... [regenrx] wrote:
>>>
>>>

>>> Having fun with resonant tank circuits.... needed a tapped coil to play:
>>> http://www.learnmorsecode.com/regen/coiltaps.jpg
>>> http://www.learnmorsecode.com/regen/00regen.html
>>>
>>>
>>
>
>

27875. Re: [regenrx] Re: Can a regen Rx be integrated into a transceiver or matched to a tr

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-05 17:30:52 UTC
From: b_weeber@...
Topic: 27870 Message: 27875

There is a lot of information about the ww2 Paraset
https://www.google.com/search?q=paraset&source=lnms&tbm=isch
https://www.google.com/search?q=paraset&source=lnms&tbm=isch

Peter vk3ye has built this one. Intersting also, because it is a solid state design:
https://www.youtube.com/watch?v=GJBRIf5Xkzw https://www.youtube.com/watch?v=GJBRIf5Xkzw
Inproved version with 30 watts:
https://www.youtube.com/watch?v=-WPAsaS5eFo https://www.youtube.com/watch?v=-WPAsaS5eFo

My 2 band Trx. The oscillator runs on 80m, for 40m the frequency is doubled:
http://www.dl0hbs.de/qrp-mas16.php https://www.youtube.com/watch?v=-WPAsaS5eFo

To hit the right frequency:
1. Zero beat the receiver to the other station.
2. Zero beat your transmitter to your receiver. In order to do this, the transmitter has to be isolated well from your regen receiver, otherwise the overloaded receiver is locking into the transmitter's frequency. In my case, only the oscillator is started without the power amplifier by pressing the zero button.
3. Last thing is, to turn the receiver either a little bit up or down, to hear the other station on a comfortable tone. Beeing able, to tune the receiver independently, is an advantage.

Best regards,
Bernd DF3DL

27876. Re: Can a regency Rx be integrated into a transceiver or matched to a transmitter.

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-05 23:30:58 UTC
From: wb8yyy@...
Topic: 27867 Message: 27876

Dear OM

Yes. but I find with my regen transceiver there is a practical limitation if you answer someone with a modern superhet. I find difficulty spotting my transmitter to what I hear in the regen. while a regen is fun for listening, a dc or superhet is more practical for a transceiver.

There are 2 solid state regen transceiver kits now. The paraset 80 or 40m rig from qrpguys even has QSK, I have one of these. the bayou jumper lacks qsk tr switching. an observation, the WBR receiver I built seems more selective but no data yet.

Curt

27877. Ozarkcon in Branson this coming weekend

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-06 00:42:08 UTC
From: Jim Scott
Topic: 27877 Message: 27877

Thought I should mention that there is a conference about radio in Branson this weekend.

The 4 State QRP Group puts this event on annually. QRPers love to build and this conference is a good one.

For more information and list of presentations go to http://www.ozarkcon.com/

73,

Jim Scott
WB0IYC
Life Member ARRL
FISTS 15327
Joplin, MO EM27RC
http://www.wb0iyc.com

The whole universe is waiting...
http://www.jpl.nasa.gov/

27878. Re: Can a regency Rx be integrated into a transceiver or matched to a transmitter.

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-06 01:11:21 UTC
From: dulmagedon@...
Topic: 27867 Message: 27878

OH U put Ur finger thru the paper there A good regen will out hear any modern superhet and I do mean any. If your tx is set up in synch with Ur Rx section they will track the same as in the one I pictured however my other transceiver also does. However I dont think anyone understands yes this works and works well.
donVe3LYX

27879. Re: [regenrx] Re: Can a regency Rx be integrated into a transceiver or matched to a transmitter.

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-06 02:03:50 UTC
From: Bill Houghton
Topic: 27867 Message: 27879

A common combination of TX and regen RX are the Heathkit Lunchbox series.
Bill, WA6NEQ

From: "dulmagedon@... [regenrx]" <regenrx@yahoogroups.com>
To: regenrx@yahoogroups.com
Sent: Wednesday, April 5, 2017 6:11 PM
Subject: [regenrx] Re: Can a regency Rx be integrated into a transceiver or matched to a transmitter.

OH U put Ur finger thru the paper there A good regen will out hear any modern superhet and I do mean any. If your tx is set up in synch with Ur Rx section they will track the same as in the one I pictured however my other transceiver also does. However I dont think anyone understands yes this works and works well.
donVe3LYX

27880. Re: [regenrx] Re: Can a regency Rx be integrated into a transceiver or matched to a transmitter.

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-06 10:52:58 UTC
From: dulmagedon@...
Topic: 27867 Message: 27880

I have one, mine is a Two-er but secretly i want a Ten-er. Although it is a supergenny RX which does not appear all that super.
donVE3LYX

27881. Re: Can a regency Rx be integrated into a transceiver or matched to a transmitter.

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-06 14:16:31 UTC
From: Baruch Atta
Topic: 27867 Message: 27881

This makes me wonder if it technically possible, or even desirable, to use a regency ...

Regency was the brand name of a nice superhet tube based shortwave receiver in the 1960's, marketed by Radio Shack of blessed memory. I remember sitting with mine in 7th and 8th grade for hours. Good memories! Thanks for the reminder.

Joe W3TTT

27882. Re: Can a regen Rx be integrated into a transceiver or matched to a transmitter.

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-06 15:50:33 UTC
From: Ottavio Caruso
Topic: 27882 Message: 27882

It was a typo with the autocorrect on my tablet!

On Thursday, 6 April 2017, Baruch Atta baruchatta@... [regenrx] <
regenrx@yahoogroups.com> wrote:

>
>
> This makes me wonder if it technically possible, or even desirable, to use
> a regency ...
>
> Regency was the brand name of a nice superhet tube based shortwave
> receiver in the 1960's, marketed by Radio Shack of blessed memory. I
> remember sitting with mine in 7th and 8th grade for hours. Good memories!
> Thanks for the reminder.
>
> Joe W3TTT
>
>
>

27883. How to wire an LDR module

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-06 17:51:05 UTC
From: Rob
Topic: 27883 Message: 27883

Can anyone enlighten me as to how to wire this simple LDR module?
http://www.learnmorsecode.com/pic/LDRmodule.jpg
http://www.ebay.com/itm/200982532672

I thought it was supposed to be wired to PLUS and MINUS volts on VCC GND
and then the output SIG would show voltage when exposed to light.

But I get no SIG change when I illuminate it.

I can't find any documentation on it.

27884. Re: [regenrx] Re: Can a regen Rx be integrated into a transceiver or matched to a transmitter.

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-06 17:58:09 UTC
From: Bill Cromwell
Topic: 27882 Message: 27884

Hi,

In the first few seconds I wondered why you wanted to use a Regency in a transceiver but quickly realized it was a typo. Context cane be our friend. I was once again pleased that I set my autocorrect to autosuggest. I *always* have the final say so I make my own mistakes <evil grin>. More recently Regency made solid state V/UHF "police" scanners - also worked on the ham bands.

As you have seen, there are hams who use regen</cy> receiver section in their transceivers. In my experience the statements about regens "outhearing" *any* other receiver are true.

Good luck with your project.

73,

Bill KU8H

On 04/06/2017 11:50 AM, Ottavio Caruso ottavio2006-degen@... [regenrx] wrote:
>
> It was a typo with the autocorrect on my tablet!
>
> On Thursday, 6 April 2017, Baruch Atta baruchatta@...
> <mailto:baruchatta@...> [regenrx] <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>> wrote:
>
> This makes me wonder if it technically possible, or even
> desirable, to use a regency ...
>
> Regency was the brand name of a nice superhet tube based shortwave
> receiver in the 1960's, marketed by Radio Shack of blessed memory.
> I remember sitting with mine in 7th and 8th grade for hours. Good
> memories! Thanks for the reminder.
>
> Joe W3TTT
>
>

--
bark less - wag more

27885. Re: [regenrx] How to wire an LDR module

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-06 20:12:06 UTC
From: msalbert@...
Topic: 27883 Message: 27885

Hi Rob, do you have The board schematic? I tried downloading it from the eBay page but couldn't see anything. Looks like it's just an LDR feeding a op amp used as a comparator. Not sure at what light level the switch point is supposed to be, so It might need to be really really dark to see a change? For some peculiar reason the eBay specification lists resistance change and I bet that is of the LDR part itself. I suspect the board output is a voltage change. Try measuring the voltage on both leads of the LDR, Referenced to ground. You should see one of them changing as the light level varies. Good luck,
Mark KB9VKE -----Original Message----- From: Rob roomberg@ptd.net [regenrx] To: regenrx Sent: Thu, Apr 6, 2017 12:51 PM Subject: [regenrx] How to wire an LDR module

Can anyone enlighten me as to how to wire this simple LDR module? http://www.learnmorsecode.com/pic/LDRmodule.jpg http://www.ebay.com/itm/200982532672 I thought it was supposed to be wired to PLUS and MINUS volts on VCC GND and then the output SIG would show voltage when exposed to light. But I get no SIG change when I illuminate it. I can't find any documentation on it.

27886. Re: Can a regen Rx be integrated into a transceiver or matched to a transmitter.

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-06 22:19:12 UTC
From: les.au49@...
Topic: 27882 Message: 27886

Hello Ottavio,

I think you'll find a number of list members use a regen receiver "on the air". Don springs instantly to mind and (of course) our "Amigo" Arnie. Tony Langton, GM4HTU, built a solid state Jones superhet. He said, "Results are impressive. There is only a slight warm-up drift and SSB is easily copied."

I can agree with Tony - using his solid state design (not exactly his design, but similar) I easily copy SSB (here in Australia the bands are NOT crowded). On 80m I can easily hear stations 1200km to the south and north. The secret is in the design of the tuning mechanism - not the electronics!

Don uses a 'straight' regen. He likes simplicity. However, if I wanted to build a regen set to use 'on air' (and I do) I would build a 3 tube Jones Superhet. Some (Arnie and Gary Johansson) prefer a design called Regenerodyne. I'm for the more conventional Jones superhet.

Can I suggest you sort out your transmitter, power supply and transmit-receive logic before you build the receiver? If you want a circuit for T-R logic, I have one. (But solid state. It won't switch the B+ supply (hundreds of volts) unless you use a relay.)

Finally, can a regen set give reliable communication? During WWII the poles used a set called Pipzstok for comms between "London" and Warsaw. The receiver? 6K8 and 6SJ7 detector. 1200km Crowded bands. And the transmitter? A single 12L6 - sometimes run in an oil bath to keep it cool. Today I would use a minimum of 3 tubes in the receiver. Tubes are cheap, and every extra tube gives a lot of extra performance. I would use a separate detector (rather than an oscillating detector).

Build your set solidly. Most builders take the attitude "Oh, I'm just building a 2 tube regen set." They skimp on the tuning capacitor and dial. They don't brace the chassis (etc). Build your set like a battleship - that's the secret of a good set to use "on air".

I hope this helps.

Les

For regenerodyne click here:
http://www.qsl.net/wd4nka/TEXTS/REGENf~1.HTM http://www.qsl.net/wd4nka/TEXTS/REGENf

See also:
https://www.prismnet.com/~nielw/3tube_xtal/3tube_xtal.htm
https://www.prismnet.com/~nielw/3tube_xtal/3tube_xtal.htm
http://makearadio.com/visitors/tomboyd-sw1.php
http://makearadio.com/visitors/tomboyd-sw1.php

27887. Re: Can a regen Rx be integrated into a transceiver or matched to a transmitter.

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-06 22:20:33 UTC
From: les.au49@...
Topic: 27882 Message: 27887

Oh - one more thing. A good aerial is an essential part of a good station. - just as important at the receiver.

Les

27888. Re: [regenrx] Re: Can a regen Rx be integrated into a transceiver or matched to a transmitter.

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-07 00:53:27 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27882 Message: 27888

Dear amigos : I am really happy that the relevant topic of the mechanical construction of regenerative , Jones superheterodynes and my Regenerodyne optimized design has been brought to the attention of the regenX list members.

ZL2JJ is my mechanical reference for a home built regenerative... including the need for extensive shielding, good grounding to the chassis, and good voltage regulation.

From a mechanical point of view the ideal air spaced variable capacitor and dial mechanism is to use one from a BC221 or LM heterodyne frequency meter, or from the Soviet clone under the name of CHA4-1.... Second choice will be the air spaced capacitor and dial mechanism from any of the Command Set receivers like BC454 or BC455, or if you want to listen to lower frequencies use a BC453 assembly.

Take also into consideration the use of well filtered and regulated direct current for the vacuum tube filaments, as well as for the plate and screen voltages...

Even the simplest regenerative like the Kitchin design using just three NPN common transistors can provide excellent performance if you make a big effort in assuring excellent mechanical stability, and use the best possible voltage regulation, plus high quality regeneration control potentiometer...

73 and DX

Arnie Coro

CO2KK Host of Dxers Unlimited radio hobby program of Radio Havana Cuba

On 06/04/17 18:19, les.au49@... [regenrx] wrote:
>
>
> Hello Ottavio,
>
> I think you'll find a number of list members use a regen receiver "on
> the air". Don springs instantly to mind and (of course) our "Amigo"
> Arnie. Tony Langton, GM4HTU, built a solid state Jones superhet. He
> said, "Results are impressive. There is only a slight warm-up drift
> and SSB is easily copied."
>
> I can agree with Tony - using his solid state design (not exactly his
> design, but similar) I easily copy SSB (here in Australia the bands

> are NOT crowded). On 80m I can easily hear stations 1200km to the
> south and north. The secret is in the design of the tuning mechanism
> - not the electronics!
>
> Don uses a 'straight' regen. He likes simplicity. However, if I
> wanted to build a regen set to use 'on air' (and I do) I would build a
> 3 tube Jones Superhet. Some (Arnie and Gary Johansson) prefer a
> design called Regenerodyne. I'm for the more c onventional Jones
> superhet.
>
> Can I suggest you sort out your transmitter, power supply and
> transmit-receive logic before you build the receiver? If you want a
> circuit for T-R logic, I have one. (But solid state. It won't switch
> the B+ supply (hundreds of volts) unless you use a relay.)
>
> Finally, can a regen set give reliable communication? During WWII the
> poles used a set called Pipzstok for comms between "London" and
> Warsaw. The receiver? 6K8 and 6SJ7 detector. 1200km Crowded bands.
> And the transmitter? A single 12L6 - sometimes run in an oil bath to
> keep it cool. Today I would use a minimum of 3 tubes in the
> receiver. Tubes are cheap, and every extra tube gives a lot of extra
> performance. I would use a separate detector (rather than an
> oscillating detector).
>
> Build your set solidly. Most builders take the attitude "Oh, I'm just
> building a 2 tube regen set." They skimp on the tuning capacitor and
> dial. They don't brace the chassis (etc). Build your set like a
> battleship - that's the secret of a good set to use "on air".
>
> I hope this helps.
>
> Les
>
>
> For regenerodyne click here:
> http://www.qsl.net/wd4nka/TEXTS/REGENf~1.HTM
> <http://www.qsl.net/wd4nka/TEXTS/REGENf>
>
> See also:
> https://www.prismnet.com/~nielw/3tube_xtal/3tube_xtal.htm
> <https://www.prismnet.com/%7Enielw/3tube_xtal/3tube_xtal.htm>
> http://makearadio.com/visitors/tomboyd-sw1.php
>
>
>
>

27889. Re: [regenrx] Re: Can a regen Rx be integrated into a transceiver or matched to a transmitter.

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-07 15:12:51 UTC
From: Bill Cromwell
Topic: 27882 Message: 27889

Hi,

Building radios like battleships is really required for good performance from superhets too. Little toy radios that flex and bend will drive you to drink or maybe just to a stamp collecting hobby.

73,

Bill KU8H

On 04/06/2017 06:19 PM, les.au49@... [regenrx] wrote:
> Hello Ottavio,
>
> I think you'll find a number of list members use a regen receiver "on the air". Don springs instantly to mind and (of course) our "Amigo" Arnie. Tony Langton, GM4HTU, built a solid state Jones superhet. He said, "Results are impressive. There is only a slight warm-up drift and SSB is easily copied."
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> I can agree with Tony - using his solid state design (not exactly his design, but similar) I easily copy SSB (here in Australia the bands are NOT crowded). On 80m I can easily hear stations 1200km to the south and north. The secret is in the design of the tuning mechanism - not the electronics!
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> Don uses a 'straight' regen. He likes simplicity. However, if I wanted to build a regen set to use 'on air' (and I do) I would build a 3 tube Jones Superhet. Some (Arnie and Gary Johansson) prefer a design called Regenerodyne. I'm for the more conventional Jones superhet.
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> Can I suggest you sort out your transmitter, power supply and transmit-receive logic before you build the receiver? If you want a circuit for T-R logic, I have one. (But solid state. It won't switch the B+ supply (hundreds of volts) unless you use a relay.)
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> Finally, can a regen set give reliable communication? During WWII the poles used a set called Pipzstok for comms between "London" and Warsaw. The receiver? 6K8 and 6SJ7 detector. 1200km Crowded bands. And the transmitter? A single 12L6 - sometimes run in an oil bath to keep it cool. Today I would use a minimum of 3 tubes in the receiver. Tubes are cheap, and every extra tube gives a lot of extra performance. I would use a separate detector (rather than an oscillating detector).

>
> Build your set solidly. Most builders take the attitude "Oh, I'm just
> building a 2 tube regen set." They skimp on the tuning capacitor and
> dial. They don't brace the chassis (etc). Build your set like a
> battleship - that's the secret of a good set to use "on air".
>
> I hope this helps.
>
> Les
>
>
> For regenerodyne click here:
> http://www.qsl.net/wd4nka/TEXTS/REGENf~1.HTM
> <http://www.qsl.net/wd4nka/TEXTS/REGENf>
>
> See also:
> https://www.prismnet.com/~nielw/3tube_xtal/3tube_xtal.htm
> <https://www.prismnet.com/%7Enielw/3tube_xtal/3tube_xtal.htm>
> http://makearadio.com/visitors/tomboyd-sw1.php
>
>

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bark less - wag more

27890. A DIFFERENT RF filter for the Desert Ratt 2

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-07 20:57:28 UTC
From: michaelleblanc1@...
Topic: 27890 Message: 27890
Attachments: 1 described; binary payloads are missing from this source WARC

I've finished my second build of the Desert Ratt 2. It's fairly stock, with a couple of very minor changes. Performance is stellar, with one exception: I'm occasionally getting breakthrough of local FM stations.
As you know, the DR2 comes equipped with a high-pass filter to block local MW stations. I'm on the east coast of Canada, and here we've closed the MW stations in favour of FM stations, so I don't need the filter. I tried removing the filter, but the radio went quiet, I presume because of an impedance mismatch. Has anyone had any experience with substituting the simple high-pass filter for a low-pass filter that might knock back some of the FM boomers around here?

I tried replacing a Butterworth 3-element Pi filter using the online calculator at http://www.calculatoredge.com/electronics/bw%20pi%20low%20pass.htm http://www.calculatoredge.com/electronics/bw%20pi%20low%20pass.htm, using 1750 ohms as the impedance and a cutoff frequency of 9.15 MHz -- these values were selected to fit my available components.

However, the filter dropped the available RF energy from the antenna to almost nothing; again I'm presuming that 1750 ohms is either too much or too little impedance.

Anybody have experience with this type of problem?

-Michael VE1LEB

27891. Re: Can a regency Rx be integrated into a transceiver or matched to a transmitter.

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-08 09:41:04 UTC
From: parkerp@...
Topic: 27867 Message: 27891

It's not as neat as a direct conversion arrangement (with a shared local oscillator offset on tx) but it can be done if you've got a good stable regen.

A difficulty is netting them onto the tx frequency as the strong signal from a tx oscillator can overload them (especially if the regen is finely set).

This video is a regen rx/tx combination. It's worked Canada from Australia.

https://www.youtube.com/watch?v=-WPAsaS5eFo https://www.youtube.com/watch?v=-WPAsaS5eFo

This is the earlier version of that receiver

https://www.youtube.com/watch?v=WREwJQVE8xI https://www.youtube.com/watch?v=WREwJQVE8xI

73, Peter VK3YE

27892. Re: Can a regency Rx be integrated into a transceiver or matched to a transmitter.

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-08 10:15:20 UTC
From: Ottavio Caruso
Topic: 27867 Message: 27892

On Saturday, 8 April 2017, parkerp@... [regenrx] <
regenrx@yahoogroups.com> wrote:

>
>
> It's not as neat as a direct conversion arrangement (with a shared local
> oscillator offset on tx) but it can be done if you've got a good stable
> regen.
>
> A difficulty is netting them onto the tx frequency as the strong signal
> from a tx oscillator can overload them (especially if the regen is finely
> set).
>
>
>

Thanks Peter,

It was actually your video about zero beating on direct conversion
receivers that prompted my question. Up to that point i thought you could
only connect a trasmitter to a superhet or a direct conversion.

>

27893. Re: [regenrx] Variable Capacitors / Condenser

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-08 21:07:48 UTC
From: derekjhook@...
Topic: 27678 Message: 27893

Late to the topic of galena
But try rock shops
http://dannytherockman.com/shop-by-rock-type/g/galena/cat_449.html?ccUser=
http://dannytherockman.com/shop-by-rock-type/g/galena/cat_449.html?ccUser=

27894. Re: [regenrx] Variable Capacitors / Condenser

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-08 21:50:46 UTC
From: Rob
Topic: 27678 Message: 27894

Interesting link for galena.
BUT
I couldn't figure out how to buy at retail level.
Anybody out there figure this
out?::

Welcome to Dannytherockman.com!
This is a wholesale only website. Please make sure you read and
understand our Terms and Conditions before you register. We do not have
pages of legal copy, just a simple outline of our policies. Thank you.

On 04/08/2017 05:07 PM, derekjhook@... [regenrx] wrote:
>
> Late to the topic of galena
> But try rock shops
>
> http://dannytherockman.com/shop-by-rock-type/g/galena/cat_449.html?ccUser=
>
>
>

27895. Re: [regenrx] Variable Capacitors / Condenser

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-08 21:58:10 UTC
From: Rob
Topic: 27678 Message: 27895

1 inch chunk of galena for $10

http://www.ebay.com/itm/222251636625

Probably enough galena to may 1,000 diodes.

or 100 chunks to play with cat whiskers.

On 04/08/2017 05:07 PM, derekjhook@... [regenrx] wrote:
>
> Late to the topic of galena
> But try rock shops
>
> http://dannytherockman.com/shop-by-rock-type/g/galena/cat_449.html?ccUser=
>
>
>

27896. Re: [regenrx] Variable Capacitors / Condenser

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-08 22:11:02 UTC
From: Michael
Topic: 27678 Message: 27896

On 08.04.17 22:58, Rob roomberg@... [regenrx] wrote:
>
> 1 inch chunk of galena for $10
...
> Probably enough galena to may 1,000 diodes.
> or 100 chunks to play with cat whiskers.
.....

Ideal for that long-planned EMP-proof RX.

And enough to supply clones to 100+ neighbors...

MichaelUK

27897. Re: [regenrx] Variable Capacitors / Condenser

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-09 00:06:03 UTC
From: Rob
Topic: 27678 Message: 27897

make no may diodes

damn speil checker

On 04/08/2017 05:58 PM, Rob roomberg@... [regenrx] wrote:
>
> 1 inch chunk of galena for $10
>
> http://www.ebay.com/itm/222251636625
>
> Probably enough galena to may 1,000 diodes.
>
> or 100 chunks to play with cat whiskers.
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>
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>> Late to the topic of galena
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>> http://dannytherockman.com/shop-by-rock-type/g/galena/cat_449.html?ccUser=
>>
>>
>
>

27898. what type wire should a galena cat whisker be made out of?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-09 01:08:42 UTC
From: Rob
Topic: 27678 Message: 27898

I ordered some of this galena.

Is there any particular rules when selecting the type of wire
to make the point contact cat whisker?

I have copper wire , steel wire, silver wire..... steel spring wire.....

On 04/08/2017 06:11 PM, Michael michael.setaazul@...
[regenrx] wrote:
>
>
> On 08.04.17 22:58, Rob roomberg@... [regenrx] wrote:
> >
> > 1 inch chunk of galena for $10
> ...
>
http://www.ebay.com/itm/222251636625

> > Probably enough galena to make 1,000 diodes.
> > or 100 chunks to play with cat whiskers.
> .....
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> Ideal for that long-planned EMP-proof RX.
>
> And enough to supply clones to 100+ neighbors...
>
> MichaelUK
>
>

27899. Re: [regenrx] what type wire should a galena cat whisker be made out of?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-09 01:44:22 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27678 Message: 27899

Hola amigos ! My first galena detector receiver had a cat's whisker wire made of what seemed to be spring steel. It was mounted on a very flexible arrangement that had a ball and socket support... You could let loose the clamp sorrounding the ball that supported the cat's whisker until you found the ¨sweet spot ¨ , then one had to tighten the clamp to keep the radio working at maximum efficiency that was achieved at the sweet spot on the galena stone fragment.

By the way,,, that radio used a coil wound of common enamel insulated wire that was sanded at the half of the turn so that a wiper could move over it, selecting how many turns you wanted and thus tuning to a station... My radio had a single mica capacitor in parallel with the coil...

I made several clones for my high school friends, and results depended a lot according to the location of the station or stations that could be picked up, the length of the antenna and the use of a ground system (typical ground was a wire connected with a C clamp to the cold water pipes..

Earphones were of two types, high impedance magnetic ones and ceramic also high impedance crystal single ear earphone.

Using the Russian D9E and similar super sensitive germanium diodes in a voltage doubler or voltage quadrupler detector circuit provides much higher volume than what can be obtained with the primitive galena crystal, or the GEM shaving blade...

73 and DX

Arnie Coro

CO2KK Host of Dxers Unlimited radio hobby program at Radio Havana Cuba

On 08/04/17 21:08, Rob roomberg@... [regenrx] wrote:
>
>
> I ordered some of this galena.
>
> Is there any particular rules when selecting the type of wire
> to make the point contact cat whisker?
>
> I have copper wire , steel wire, silver wire..... steel spring wire.....
>
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>
>

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>
> On 04/08/2017 06:11 PM, Michael michael.setaazul@...
> [regenrx] wrote:
>>
>>
>> On 08.04.17 22:58, Rob roomberg@... [regenrx] wrote:
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>> > 1 inch chunk of galena for $10
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>> > Probably enough galena to make 1,000 diodes.
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>> And enough to supply clones to 100+ neighbors...
>>
>> MichaelUK
>>
>
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>

27900. Re: [regenrx] what type wire should a galena cat whisker be made out of?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-09 01:59:46 UTC
From: Rob
Topic: 27678 Message: 27900

Thanks Arnie,
I'm building one just for show and tell....to have the kids hear and see
various
layers of history.

On 04/08/2017 09:44 PM, 'Prof. Arnaldo Coro Antich' coro@...
[regenrx] wrote:
>
> Hola amigos ! My first galena detector receiver had a cat's whisker
> wire made of what seemed to be spring steel. It was mounted on a very
> flexible arrangement that had a ball and socket support... You could
> let loose the clamp sorrounding the ball that supported the cat's
> whisker until you found the ¨sweet spot ¨ , then one had to tighten
> the clamp to keep the radio working at maximum efficiency that was
> achieved at the sweet spot on the galena stone fragment.
>
> By the way,,, that radio used a coil wound of common enamel insulated
> wire that was sanded at the half of the turn so that a wiper could
> move over it, selecting how many turns you wanted and thus tuning to a
> station... My radio had a single mica capacitor in parallel with the
> coil...
>
> I made several clones for my high school friends, and results
> depended a lot according to the location of the station or stations
> that could be picked up, the length of the antenna and the use of a
> ground system (typical ground was a wire connected with a C clamp to
> the cold water pipes..
>
> Earphones were of two types, high impedance magnetic ones and ceramic
> also high impedance crystal single ear earphone.
>
> Using the Russian D9E and similar super sensitive germanium diodes in
> a voltage doubler or voltage quadrupler detector circuit provides much
> higher volume than what can be obtained with the primitive galena
> crystal, or the GEM shaving blade...
>
> 73 and DX
>
> Arnie Coro
>
> CO2KK Host of Dxers Unlimited radio hobby program at Radio Havana Cuba
>
>
> On 08/04/17 21:08, Rob roomberg@... [regenrx] wrote:

>>
>>
>> I ordered some of this galena.
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>> Is there any particular rules when selecting the type of wire
>> to make the point contact cat whisker?
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>> I have copper wire , steel wire, silver wire..... steel spring wire.....
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>> On 04/08/2017 06:11 PM, Michael michael.setaazul@...
>> [regenrx] wrote:
>>>
>>>
>>> On 08.04.17 22:58, Rob roomberg@... [regenrx] wrote:
>>> >
>>> > 1 inch chunk of galena for $10
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>> http://www.ebay.com/itm/222251636625
>>
>>
>>> > Probably enough galena to make 1,000 diodes.
>>> > or 100 chunks to play with cat whiskers.
>>> .....
>>>

27901. Re: [regenrx] what type wire should a galena cat whisker be made out of?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-09 02:14:30 UTC
From: Charles Moizeau
Topic: 27678 Message: 27901

Rob,

As you can divine from the good professor's reply, the spring steel is what you MUST use.

The tip of a 6-8 turn, generally conically not linearly wound spring steel wire, to a diameter of 1/8th inch at the end that aims at the galena, that from a diameter of about 3/8"that hitches to the hand-operated control arm and knob.

Basically, the small end of the spring steel has to feel around the surface of the galena to find the "honey spot" (that best known while you listen for maximum volume). Once located, press down with the hand-operated control on the catwhisker so that it will stay in that honey spot.

Possibly the internet will reveal pictures of catwhisker assemblies. To my knowledge, there was no firm tie-down facility to secure the catwhisker in its honey-spot location once that had been discovered.

72,

Charles

From: regenrx@yahoogroups.com <regenrx@yahoogroups.com> on behalf of Rob roomberg@... [regenrx] <regenrx@yahoogroups.com>
Sent: Saturday, April 8, 2017 9:08 PM
To: regenrx@yahoogroups.com
Subject: [regenrx] what type wire should a galena cat whisker be made out of?

I ordered some of this galena.

Is there any particular rules when selecting the type of wire
to make the point contact cat whisker?

I have copper wire , steel wire, silver wire..... steel spring wire.....

On 04/08/2017 06:11 PM, Michael
michael.setaazul@btopenworld.com<mailto:michael.setaazul@...> [regenrx] wrote:

On 08.04.17 22:58, Rob roomberg@...<mailto:roomberg@...> [regenrx] wrote:
>
> 1 inch chunk of galena for $10
...

http://www.ebay.com/itm/222251636625

> Probably enough galena to make 1,000 diodes.
> or 100 chunks to play with cat whiskers.

.....

Ideal for that long-planned EMP-proof RX.

And enough to supply clones to 100+ neighbors...

MichaelUK

27902. Re: [regenrx] what type wire should a galena cat whisker be made out of?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-09 02:22:50 UTC
From: Tom Lee
Topic: 27678 Message: 27902

A popular choice with galena was phosphor-bronze wire. It's springy
enough without being too stiff. Other than a very light contact will
destroy the rectification, so there's a tradeoff between sensitivity and
mechanical stability. Hot spots on galena consequently don't stay hot
for long, but the need for continual hunting is part of the charm.

Despite lore, the chemical composition of the wire is not particularly
important for these types of detectors, as the rectifying barrier is
already on the surface (it's not a simple Schottky contact). Its
dimensions and mechanical properties will make a far bigger difference.

--Cheers,
Tom

--
Prof. Thomas H. Lee
Allen Bldg., CIS-205
420 Via Palou Mall
Stanford University
Stanford, CA 94305-4070
http://www-smirc.stanford.edu
650-725-3383 (public fax; no confidential information, please)

On 4/8/2017 6:08 PM, Rob roomberg@... [regenrx] wrote:
>
> I ordered some of this galena.
>
> Is there any particular rules when selecting the type of wire
> to make the point contact cat whisker?
>
> I have copper wire , steel wire, silver wire..... steel spring wire.....
>
>
>
>
>
>
> On 04/08/2017 06:11 PM, Michael michael.setaazul@...
> [regenrx] wrote:
>>
>>
>> On 08.04.17 22:58, Rob roomberg@... [regenrx] wrote:
>> >
>> > 1 inch chunk of galena for $10
>> ...

>>
> http://www.ebay.com/itm/222251636625
>
>
>> > Probably enough galena to make 1,000 diodes.
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>>
>> Ideal for that long-planned EMP-proof RX.
>>
>> And enough to supply clones to 100+ neighbors...
>>
>> MichaelUK
>>
>
>

27903. RE: [regenrx] what type wire should a galena cat whisker be made out of?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-09 02:59:32 UTC
From: Hubert Miller
Topic: 27678 Message: 27903

Tom – what is the objection to this: what if one used something like steel wool, pressed against the galena, to acquire a contact, or contacts? I was told once this does not work, but it’s not immediately clear to me, why not.

I have a nice piece of galena a friend sent me from Peru. It still needs mounting in, i think it is, “Wood’s metal”.

One idea for a demonstration ‘crystal radio’ is to use a 2 diode, fullwave voltage doubler. One diode is a fixed modern type and one is the old catwhisker style. Note, you must use very high
impedance piezo earphone with this circuit. Each diode output is across a 0.001 uF (1 nF) capacitor. Then, you can hear a broadcast even with the catwhisker not adjusted,
and you simply tune in a station, and then peak the catwhisker adjustment to bring up the audio louder. This is for a set that you want to demonstrate the old style diode detection.
-Hue

* Subject: Re: [regenrx] what type wire should a galena cat whisker be made out of?

>A popular choice with galena was phosphor-bronze wire. It's springy enough without being too stiff. Other than a very light contact will destroy the rectification, so there's a tradeoff between sensitivity and mechanical stability. Hot spots on galena consequently don't stay hot for long, but the need for continual hunting is part of the charm.

>Despite lore, the chemical composition of the wire is not particularly important for these types of detectors, as the rectifying barrier is already on the surface (it's not a simple Schottky contact). Its dimensions and mechanical properties will make a far bigger difference.

27904. Re: [regenrx] what type wire should a galena cat whisker be made out of?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-09 03:21:04 UTC
From: Rob
Topic: 27678 Message: 27904

Thanks guys.
==========

A popular choice with galena was phosphor-bronze wire. It's springy
enough without being too stiff. Other than a very light contact will
destroy the rectification, so there's a tradeoff between sensitivity and
mechanical stability. Hot spots on galena consequently don't stay hot
for long, but the need for continual hunting is part of the charm.

Despite lore, the chemical composition of the wire is not particularly
important for these types of detectors, as the rectifying barrier is
already on the surface (it's not a simple Schottky contact). Its
dimensions and mechanical properties will make a far bigger difference.

--Cheers,
Tom

On 04/08/2017 10:14 PM, Charles Moizeau w2sh@... [regenrx] wrote:
>
> Rob,
>
>
> As you can divine from the good professor's reply, the spring steel is
> what you MUST use.
>
> The tip of a 6-8 turn, generally conically not linearly wound spring
> steel wire, to a diameter of l/8th inch at the end that aims at the
> galena, that from a diameter of about 3/8"that hitches to the
> hand-operated control arm and knob.
>
> Basically, the small end of the spring steel has to feel around the
> surface of the galena to find the "honey spot" (that best known while
> you listen for maximum volume). Once located, press down with the
> hand-operated control on the catwhisker so that it will stay in that
> honey spot.
>
> Possibly the internet will reveal pictures of catwhisker assemblies.
> To my knowledge, there was no firm tie-down facility to secure the
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>
> 72,
>
> Charles
>
> I ordered some of this galena.

>
> Is there any particular rules when selecting the type of wire
> to make the point contact cat whisker?
>
> I have copper wire , steel wire, silver wire..... steel spring wire.....
>
>
>
> On 04/08/2017 06:11 PM, Michael michael.setaazul@...
> [regenrx] wrote:
>>
>>
>> On 08.04.17 22:58, Rob roomberg@... [regenrx] wrote:
>> >
>> > 1 inch chunk of galena for $10
>> ...
>>
> http://www.ebay.com/itm/222251636625
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>
>> > Probably enough galena to make 1,000 diodes.
>> > or 100 chunks to play with cat whiskers.
>> .....
>>
>> Ideal for that long-planned EMP-proof RX.
>>
>> And enough to supply clones to 100+ neighbors...
>>
>> MichaelUK
>>
>

27905. Re: [regenrx] what type wire should a galena cat whisker be made out of?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-09 03:39:18 UTC
From: Tom Lee
Topic: 27678 Message: 27905

Hi Hue,

If you can manage a single point contact (e.g., by having just one of the steel wool whiskers make contact with the crystal), I see no fundamental reason why steel wool wouldn't work. But if you just press the mass of the steel wool against the crystal, the probability that some portion of the wool will make an ohmic (rather than rectifying) contact is nearly 100%, and that's all it takes to short out the diode and make it not function. You really want to arrange for a single point of contact, and even then, you still need to hunt around for a good spot.

As for Wood's metal, that's definitely the classic mounting method for making a good ohmic contact to the crystal body. But if one is in a hurry, a good alligator clip connection to the lump of crystal often works as well.

--Cheers,
Tom

--
Prof. Thomas H. Lee
Allen Bldg., CIS-205
420 Via Palou Mall
Stanford University
Stanford, CA 94305-4070
http://www-smirc.stanford.edu
650-725-3383 (public fax; no confidential information, please)

On 4/8/2017 7:59 PM, Hubert Miller kargo_cult@... [regenrx] wrote:
>
> Tom – what is the objection to this: what if one used something like
> steel wool, pressed against the galena, to acquire a contact, or
> contacts? I was told once this does not work,
>
> but it’s not immediately clear to me, why not.
>
> I have a nice piece of galena a friend sent me from Peru. It still
> needs mounting in, i think it is, “Wood’s metal”.
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> One idea for a demonstration ‘crystal radio’ is to use a 2 diode,
> fullwave voltage doubler. One diode is a fixed modern type and one is
> the old catwhisker style. Note, you must use very high
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> impedance piezo earphone with this circuit. Each diode output is
> across a 0.001 uF (1 nF) capacitor. Then, you can hear a broadcast

> even with the catwhisker not adjusted,
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> and you simply tune in a station, and then peak the catwhisker
> adjustment to bring up the audio louder. This is for a set that you
> want to demonstrate the old style diode
>
> detection.
>
> -Hue
>
> * *Subject:*Re: [regenrx] what type wire should a galena cat whisker
> be made out of?
>
> >A popular choice with galena was phosphor-bronze wire. It's springy
> enough without being too stiff. Other than a very light contact will
> destroy the rectification, so there's a tradeoff between sensitivity
> and mechanical stability. Hot spots on galena consequently don't stay
> hot for long, but the need for continual hunting is part of the charm.
>
> >Despite lore, the chemical composition of the wire is not
> particularly important for these types of detectors, as the rectifying
> barrier is already on the surface (it's not a simple Schottky
> contact). Its dimensions and mechanical properties will make a far
> bigger difference.
>
>

27906. Re: [regenrx] what type wire should a galena cat whisker be made out of?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-09 03:53:51 UTC
From: Jordan Dobrikin
Topic: 27678 Message: 27906

Hi

The $64.00/$64,000 question!!
We are dealing with semi conductors, the "crystal" is the semi & the Cats Whisker is the conductor. Said Cats Whisker drawn to a fine point and sanded regularly to remove any oxide(s). In theory the most conductive wire that does not oxidize easily: however when push comes to shove any of the wires will do.
For interesting results wire a pair of Binding Posts in parallel to accept a range of of fixed Detectors the ubiquitous 1N34, an LED as an ersatz S Meter, Schotkky Diode, and MOSFET as a passive detector.
Also consider the other direction Foxhole detectors Razor Blades Coins and a pencil point as a Cats Whisker
Note that the Experimenters Kit contains a Schotkky Diode.

Gillette Blue Blade Crystal Radio Detector Kit

-
[image: Gillette-Blue-Blade-Crystal-Radio-Detector-Kit]
-
[image: Gillette-Blue-Blade-Crystal-Radio-Detector-Kit]
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[image: Gillette-Blue-Blade-Crystal-Radio-Detector-Kit]
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[image: Gillette-Blue-Blade-Crystal-Radio-Detector-Kit]
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[image: Gillette-Blue-Blade-Crystal-Radio-Detector-Kit]
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[image: Gillette-Blue-Blade-Crystal-Radio-Detector-Kit]
-
[image: Gillette-Blue-Blade-Crystal-Radio-Detector-Kit]

http://www.ebay.com/itm/250495237073?_trksid=p2055119.m1438.l2649&ssPageName=STRK%3AMEBIDX%3AIT

Crystal Radio Experimenters Detector Kit
http://www.ebay.com/itm/Crystal-Radio-Experimenters-Detector-Kit-/251428547849?hash=item3a8a4f2d09:g:MrwAAOSwVL1WACpH

73 de Jordan ve7jjd

On Sat, Apr 8, 2017 at 7:59 PM, Hubert Miller kargo_cult@msn.com [regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> Tom – what is the objection to this: what if one used something like steel
> wool, pressed against the galena, to acquire a contact, or contacts? I was
> told once this does not work,
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> but it’s not immediately clear to me, why not.
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> old catwhisker style. Note, you must use very high
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> impedance piezo earphone with this circuit. Each diode output is across a
> 0.001 uF (1 nF) capacitor. Then, you can hear a broadcast even with the
> catwhisker not adjusted,
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> and you simply tune in a station, and then peak the catwhisker adjustment
> to bring up the audio louder. This is for a set that you want to
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> detection.
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> - *Subject:* Re: [regenrx] what type wire should a galena cat whisker
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> >A popular choice with galena was phosphor-bronze wire. It's springy
> enough without being too stiff. Other than a very light contact will
> destroy the rectification, so there's a tradeoff between sensitivity and
> mechanical stability. Hot spots on galena consequently don't stay hot for
> long, but the need for continual hunting is part of the charm.
>
> >Despite lore, the chemical composition of the wire is not particularly
> important for these types of detectors, as the rectifying barrier is
> already on the surface (it's not a simple Schottky contact). Its dimensions
> and mechanical properties will make a far bigger difference.
>
>
>

--
73 Jordan VE7JJD

27907. RE: [regenrx] what type wire should a galena cat whisker be made out of?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-09 03:57:22 UTC
From: Hubert Miller
Topic: 27678 Message: 27907

Thanks, Tom ! That explains why the steel wool multi contact idea does not work.
I think i read years ago that something like this was used for another semiconductor material, corborundum, but i don’t know why that approach would work there.
As to your suggestion to just use an alligator clip grip on the crystal, great ! That removes another hurdle.
-Hue

>Hi Hue,
If you can manage a single point contact (e.g., by having just one of the steel wool whiskers make contact with the crystal), I see no fundamental reason why steel wool wouldn't work. But if you just press the mass of the steel wool against the crystal, the probability that some portion of the wool will make an ohmic (rather than rectifying) contact is nearly 100%, and that's all it takes to short out the diode and make it not function. You really want to arrange for a single point of contact, and even then, you still need to hunt around for a good spot.
As for Wood's metal, that's definitely the classic mounting method for making a good ohmic contact to the crystal body. But if one is in a hurry, a good alligator clip connection to the lump of crystal often works as well.
--Cheers,
Tom

27908. Re: [regenrx] what type wire should a galena cat whisker be made out of?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-09 03:59:14 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27678 Message: 27908

Dear amigo Rob: To the best of my recollection (this evoked memory had to be brought back from 1955/1956 !!!) it was one of those ¨postage stamp mica capacitors ¨ with dots of different colors to indicate the actual capacity... But I can not remember the actual value...

Doing some ¨reverse historical engineering¨ capacity values between 100 picofarads and 500 picofarads could be tested wih a classic air wound coil on a three or four inches diameter PVC pipe... and you may also try a ferrite rod Broadcast Band antenna...

73 and DX

Arnie Coro CO2KK

On 08/04/17 21:59, Rob roomberg@... [regenrx] wrote:
>
>
> Thanks Arnie,
> I'm building one just for show and tell....to have the kids hear and
> see various
> layers of history.
>
>
> On 04/08/2017 09:44 PM, 'Prof. Arnaldo Coro Antich' coro@...
> [regenrx] wrote:
>>
>> Hola amigos ! My first galena detector receiver had a cat's whisker
>> wire made of what seemed to be spring steel. It was mounted on a very
>> flexible arrangement that had a ball and socket support... You could
>> let loose the clamp sorrounding the ball that supported the cat's
>> whisker until you found the ¨sweet spot ¨ , then one had to tighten
>> the clamp to keep the radio working at maximum efficiency that was
>> achieved at the sweet spot on the galena stone fragment.
>>
>> By the way,,, that radio used a coil wound of common enamel insulated
>> wire that was sanded at the half of the turn so that a wiper could
>> move over it, selecting how many turns you wanted and thus tuning to
>> a station... My radio had a single mica capacitor in parallel with
>> the coil...
>>
>> I made several clones for my high school friends, and results
>> depended a lot according to the location of the station or stations
>> that could be picked up, the length of the antenna and the use of a
>> ground system (typical ground was a wire connected with a C clamp to
>> the cold water pipes..

>>
>> Earphones were of two types, high impedance magnetic ones and
>> ceramic also high impedance crystal single ear earphone.
>>
>> Using the Russian D9E and similar super sensitive germanium diodes in
>> a voltage doubler or voltage quadrupler detector circuit provides
>> much higher volume than what can be obtained with the primitive
>> galena crystal, or the GEM shaving blade...
>>
>> 73 and DX
>>
>> Arnie Coro
>>
>> CO2KK Host of Dxers Unlimited radio hobby program at Radio Havana Cuba
>>
>>
>> On 08/04/17 21:08, Rob roomberg@... [regenrx] wrote:
>>>
>>>
>>> I ordered some of this galena.
>>>
>>> Is there any particular rules when selecting the type of wire
>>> to make the point contact cat whisker?
>>>
>>> I have copper wire , steel wire, silver wire..... steel spring
>>> wire.....
>>>
>>>
>>>
>>>
>>>
>>>
>>> On 04/08/2017 06:11 PM, Michael michael.setaazul@...
>>> [regenrx] wrote:
>>>>
>>>>
>>>> On 08.04.17 22:58, Rob roomberg@... [regenrx] wrote:
>>>> >
>>>> > 1 inch chunk of galena for $10
>>>> ...
>>>>
>>> http://www.ebay.com/itm/222251636625
>>>
>>>
>>>> > Probably enough galena to make 1,000 diodes.
>>>> > or 100 chunks to play with cat whiskers.
>>>> .....
>>>>
>
>

>
>

27909. RE: [regenrx] what type wire should a galena cat whisker be made out of?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-09 04:05:08 UTC
From: Hubert Miller
Topic: 27678 Message: 27909

If you use a razor blade as the ‘semiconductor’, here’s an idea that enhances the ‘visual effect’.
Get an old pencil and keep it in the pencil sharpener until it’s so short that you have it almost ground down
to the eraser holding metal. Then carve off the wood and the eraser and expose a little of the central
graphite core. Wrap some wire around the protruding graphite. This is the other diode contact. The
pencil stub with the sharpened point end is adjusted onto the razor blade, and suspended in place or
held by a #12 gauge stiff wire attached tightly to it.
-Hue

27910. Re: what type wire should a galena cat whisker be made out of?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-09 04:09:33 UTC
From: Kenneth Ketner
Topic: 27678 Message: 27910

Rob and group. The go-to gang for crystal radios is

http://www.shopping-cart.midnightscience.net/

They got mounted galena, whiskers, and a wholebuncha related stuff and books.

Zinc oxide makes a good detector. See this website.

http://sparkbangbuzz.com/zinc-oxide-diode/zinc-oxide-diode.htm

Another good reference is at

http://www.crystalradio.net/minerals/index.shtml

73

Ken Ketner
KA5ELD
PO Box 65135
Lubbock, TX 79464-5135
Sent from my iPad

27911. RE: [regenrx] what type wire should a galena cat whisker be made out of?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-09 04:12:01 UTC
From: Larry
Topic: 27678 Message: 27911

I used to work in a two way radio factory. One statement stuck in my mind. “The oxides of silver are conductive”. So I would consider a thin silver wire.

Larry

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Saturday, April 08, 2017 11:57 PM
To: regenrx@yahoogroups.com
Subject: RE: [regenrx] what type wire should a galena cat whisker be made out of?

Thanks, Tom ! That explains why the steel wool multi contact idea does not work.

I think i read years ago that something like this was used for another semiconductor material, corborundum, but i don’t know why that approach would work there.

As to your suggestion to just use an alligator clip grip on the crystal, great ! That removes another hurdle.

-Hue

>Hi Hue,
If you can manage a single point contact (e.g., by having just one of the steel wool whiskers make contact with the crystal), I see no fundamental reason why steel wool wouldn't work. But if you just press the mass of the steel wool against the crystal, the probability that some portion of the wool will make an ohmic (rather than rectifying) contact is nearly 100%, and that's all it takes to short out the diode and make it not function. You really want to arrange for a single point of contact, and even then, you still need to hunt around for a good spot.
As for Wood's metal, that's definitely the classic mounting method for making a good ohmic contact to the crystal body. But if one is in a hurry, a good alligator clip connection to the lump of crystal often works as well.
--Cheers,
Tom

27912. Re: [regenrx] what type wire should a galena cat whisker be made out of?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-09 04:11:58 UTC
From: Tom Lee
Topic: 27678 Message: 27912

The resistance of the catwhisker wire makes little difference, as the spreading resistance of the contact point itself will dominate. The geometry and mechanical properties of the wire matter much more.

And yes, a great many natural semiconductors work in place of galena. Pickard investigated over 30,000 combinations of wire and minerals, and patented a silicon detector in 1907 or thereabouts. Carborundum is unique in its tolerance of very high pressure contacts. The razor blade you mentioned works well, and has a lot of WWII history behind it. I discovered some years ago that baked pennies (and many copper coins from other countries) are also a reasonable semiconductor. Making successful point contacts is trickier than to galena, but a gentle touch with a 0.5mm mechanical pencil lead seems to do ok. One may also recycle integrated circuits: Gently abrade away the top surface of the chip and make a point contact to it (the "die paddle" provides a connection to the bulk). That produces a good detector with a much lower knee voltage than the 0.6V one expects from silicon. Finding a good spot is also much easier, thanks to the uniformity of the silicon used for chips.

--Cheers,
Tom

--
Prof. Thomas H. Lee
Allen Bldg., CIS-205
420 Via Palou Mall
Stanford University
Stanford, CA 94305-4070
http://www-smirc.stanford.edu
650-725-3383 (public fax; no confidential information, please)

On 4/8/2017 8:53 PM, Jordan Dobrikin jjdobrikin@... [regenrx] wrote:
> Hi
>
> The $64.00/$64,000 question!!
> We are dealing with semi conductors, the "crystal" is the semi & the
> Cats Whisker is the conductor. Said Cats Whisker drawn to a fine point
> and sanded regularly to remove any oxide(s). In theory the most
> conductive wire that does not oxidize easily: however when push comes
> to shove any of the wires will do.
> For interesting results wire a pair of Binding Posts in parallel to
> accept a range of of fixed Detectors the ubiquitous 1N34, an LED as an
> ersatz S Meter, Schotkky Diode, and MOSFET as a passive detector.
> Also consider the other direction Foxhole detectors Razor Blades Coins
> and a pencil point as a Cats Whisker

> Note that the Experimenters Kit contains a Schotkky Diode.
>
> Gillette Blue Blade Crystal Radio Detector Kit
>
> *
> Gillette-Blue-Blade-Crystal-Radio-Detector-Kit
>
> *
> Gillette-Blue-Blade-Crystal-Radio-Detector-Kit
>
> *
> Gillette-Blue-Blade-Crystal-Radio-Detector-Kit
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> http://www.ebay.com/itm/250495237073?_trksid=p2055119.m1438.l2649&ssPageName=STRK%3AMEBIDX%3AIT
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>

> Crystal Radio Experimenters Detector Kit
> http://www.ebay.com/itm/Crystal-Radio-Experimenters-Detector-Kit-/251428547849?hash=item3a8a4f2d09:g:MrwAAOSwVL1WACpH
>
> 73 de Jordan ve7jjd
>
>
> On Sat, Apr 8, 2017 at 7:59 PM, Hubert Miller kargo_cult@...
> <mailto:kargo_cult@...> [regenrx] <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>> wrote:
>
> Tom – what is the objection to this: what if one used something
> like steel wool, pressed against the galena, to acquire a contact,
> or contacts? I was told once this does not work,
>
> but it’s not immediately clear to me, why not.
>
> I have a nice piece of galena a friend sent me from Peru. It still
> needs mounting in, i think it is, “Wood’s metal”.
>
> One idea for a demonstration ‘crystal radio’ is to use a 2 diode,
> fullwave voltage doubler. One diode is a fixed modern type and one
> is the old catwhisker style. Note, you must use very high
>
> impedance piezo earphone with this circuit. Each diode output is
> across a 0.001 uF (1 nF) capacitor. Then, you can hear a
> broadcast even with the catwhisker not adjusted,
>
> and you simply tune in a station, and then peak the catwhisker
> adjustment to bring up the audio louder. This is for a set that
> you want to demonstrate the old style diode
>
> detection.
>
> -Hue
>
> * *Subject:*Re: [regenrx] what type wire should a galena cat
> whisker be made out of?
>
> >A popular choice with galena was phosphor-bronze wire. It's springy enough without being too
> stiff. Other than a very light contact will destroy the
> rectification, so there's a tradeoff between sensitivity and
> mechanical stability. Hot spots on galena consequently don't stay
> hot for long, but the need for continual hunting is part of the charm.
>
> >Despite lore, the chemical composition of the wire is not
> particularly important for these types of detectors, as the
> rectifying barrier is already on the surface (it's not a simple
> Schottky contact). Its dimensions and mechanical properties will

> make a far bigger difference.
>
>
>
>
> --
> 73 Jordan VE7JJD
>

27913. Re: [regenrx] what type wire should a galena cat whisker be made out of?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-09 06:39:02 UTC
From: Rob
Topic: 27678 Message: 27913

wow
I was born in 1960.

On 04/08/2017 11:59 PM, 'Prof. Arnaldo Coro Antich' coro@...
[regenrx] wrote:
>
> Dear amigo Rob: To the best of my recollection (this evoked memory
> had to be brought back from 1955/1956 !!!) it was one of those
> ¨postage stamp mica capacitors ¨ with dots of different colors to
> indicate the actual capacity... But I can not remember the actual
> value...
>
> Doing some ¨reverse historical engineering¨ capacity values between
> 100 picofarads and 500 picofarads could be tested wih a classic air
> wound coil on a three or four inches diameter PVC pipe... and you may
> also try a ferrite rod Broadcast Band antenna...
>
> 73 and DX
>
> Arnie Coro CO2KK
>
>
> On 08/04/17 21:59, Rob roomberg@... [regenrx] wrote:
>> Thanks Arnie,
>> I'm building one just for show and tell....to have the kids hear and
>> see various
>> layers of history.
>>
>>
>> On 04/08/2017 09:44 PM, 'Prof. Arnaldo Coro Antich' coro@...
>> [regenrx] wrote:
>>>
>>> Hola amigos ! My first galena detector receiver had a cat's whisker
>>> wire made of what seemed to be spring steel. It was mounted on a
>>> very flexible arrangement that had a ball and socket support... You
>>> could let loose the clamp sorrounding the ball that supported the
>>> cat's whisker until you found the ¨sweet spot ¨ , then one had to
>>> tighten the clamp to keep the radio working at maximum efficiency
>>> that was achieved at the sweet spot on the galena stone fragment.
>>>
>>> By the way,,, that radio used a coil wound of common enamel
>>> insulated wire that was sanded at the half of the turn so that a
>>> wiper could move over it, selecting how many turns you wanted and
>>> thus tuning to a station... My radio had a single mica capacitor in

>>> parallel with the coil...
>>>
>>> I made several clones for my high school friends, and results
>>> depended a lot according to the location of the station or stations
>>> that could be picked up, the length of the antenna and the use of a
>>> ground system (typical ground was a wire connected with a C clamp
>>> to the cold water pipes..
>>>
>>> Earphones were of two types, high impedance magnetic ones and
>>> ceramic also high impedance crystal single ear earphone.
>>>
>>> Using the Russian D9E and similar super sensitive germanium diodes
>>> in a voltage doubler or voltage quadrupler detector circuit provides
>>> much higher volume than what can be obtained with the primitive
>>> galena crystal, or the GEM shaving blade...
>>>
>>> 73 and DX
>>>
>>> Arnie Coro
>>>
>>> CO2KK Host of Dxers Unlimited radio hobby program at Radio Havana Cuba
>>>
>>>
>>> On 08/04/17 21:08, Rob roomberg@... [regenrx] wrote:
>>>>
>>>>
>>>> I ordered some of this galena.
>>>>
>>>> Is there any particular rules when selecting the type of wire
>>>> to make the point contact cat whisker?
>>>>
>>>> I have copper wire , steel wire, silver wire..... steel spring
>>>> wire.....
>>>>
>>>>
>>>>
>>>>
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>>>>
>>>> On 04/08/2017 06:11 PM, Michael michael.setaazul@...
>>>> [regenrx] wrote:
>>>>>
>>>>>
>>>>> On 08.04.17 22:58, Rob roomberg@... [regenrx] wrote:
>>>>> >
>>>>> > 1 inch chunk of galena for $10
>>>>> ...
>>>>>
>>>> http://www.ebay.com/itm/222251636625
>>>>

>>>>
>>>>> > Probably enough galena to make 1,000 diodes.
>>>>> > or 100 chunks to play with cat whiskers.
>>>>> ....
>>>>>
>>
>
>

27914. Re: [regenrx] Re: what type wire should a galena cat whisker be made out of? oxides of silver

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-09 06:56:39 UTC
From: Rob
Topic: 27678 Message: 27914

This is for historical purposes show and tell , for kids, so I will not be exploring anything
with razor blades.
I don't need some parent coming back at me because I sent their kid on a scavenger hunt for razor blades.

Ken...I am very familiar with all 3 webs sites..... but have not been there for a few years.

I have no problem getting parts.
1,000 transistors cost $10
100 D9B germanium diodes cost $14
I'm not looking to do any caveman or POW electronics here.
The task at hand was to merely demonstrate cat whisker galena "detection" as it was used
in the early days of radio.

food for thought.....

Pickard investigated over 30,000 combinations of wire and minerals, and patented a silicon detector in 1907 or thereabouts

“The oxides of silver are conductive”. So I would consider a thin silver wire.
Larry

On 04/09/2017 12:09 AM, Kenneth Ketner klaine@... [regenrx] wrote:
> Rob and group. The go-to gang for crystal radios is
>
> http://www.shopping-cart.midnightscience.net/
>
> They got mounted galena, whiskers, and a wholebuncha related stuff and
> books.
>
> Zinc oxide makes a good detector. See this website.
>
> http://sparkbangbuzz.com/zinc-oxide-diode/zinc-oxide-diode.htm
>
> Another good reference is at
>
> http://www.crystalradio.net/minerals/index.shtml
>
> 73
>
> Ken Ketner

> KA5ELD
> PO Box 65135
> Lubbock, TX 79464-5135
> Sent from my iPad

27915. Re: [regenrx] what type wire should a galena cat whisker be made out of?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-09 19:23:28 UTC
From: Baruch Atta
Topic: 27678 Message: 27915

Try A safety pin.☐

[image: Yahoo! Groups]
<https://groups.yahoo.com/neo;_ylc=X3oDMTJlMDltOGxxBF9TAzk3NDc2NTkwBGdycElkAzEzOTk2OTA3BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNnZnAEc3RpbWUDMTQ5MTcxOTk0NQ-->

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27916. Re: [regenrx] what type wire should a galena cat whisker be made out of?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-09 19:47:51 UTC
From: Tom Lee
Topic: 27678 Message: 27916

By all means experiment with lots of ideas. Safety pins work well with carborundum, less well but serviceably with razor blades, and not too satisfactorily with galena.

--
Prof. Thomas H. Lee
Allen Bldg., CIS-205
420 Via Palou Mall
Stanford University
Stanford, CA 94305-4070
http://www-smirc.stanford.edu
650-725-3383 (public fax; no confidential information, please)

On 4/9/2017 12:23 PM, Baruch Atta baruchatta@... [regenrx] wrote:
> Try A safety pin.☐
>
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>
>
> Yahoo! Groups
> <https://groups.yahoo.com/neo;_ylc=X3oDMTJlMDltOGxxBF9TAzk3NDc2NTkwBGdycElkAzEzOTk2OTA3BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNnZnAEc3RpbWUDMTQ5MTcxOTk0NQ-->
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> • Privacy
> <https://info.yahoo.com/privacy/us/yahoo/groups/details.html> •
> Unsubscribe
> <mailto:regenrx-unsubscribe@yahoogroups.com?subject=Unsubscribe> •
> Terms of Use <https://info.yahoo.com/legal/us/yahoo/utos/terms/>
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27917. 2 to 5 pF antenna decouple capacitor

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-09 22:08:54 UTC
From: Rob
Topic: 27917 Message: 27917

The KITCHIN regen calls for a 2 to 5 pF capacitor to decouple the
antenna capacitance when using an
outdoor antenna instead of a simple short whip antenna:

http://www.learnmorsecode.com/regen/00regen.html

Does the choice of a 2 ,3 ,4 or 5 pF capacitor make any impact on the
circuit operation
to the point where one should be used instead of the other?

27918. Re: [regenrx] what type wire should a galena cat whisker be made out of?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-09 22:15:04 UTC
From: Rob
Topic: 27678 Message: 27918

I'm not repeating Pickard's investigating 30,000 combinations of wire
and minerals for a patent.
I'm just mounting some galena in a pretty holder and making a cat
whisker ....probably with spring steel wire..... just because I have it
already.

On 04/09/2017 03:47 PM, Tom Lee tomlee@... [regenrx] wrote:
>
> By all means experiment with lots of ideas. Safety pins work well with
> carborundum, less well but serviceably with razor blades, and not too
> satisfactorily with galena.
>
> --
> Prof. Thomas H. Lee
> Allen Bldg., CIS-205
> 420 Via Palou Mall
> Stanford University
> Stanford, CA 94305-4070
> http://www-smirc.stanford.edu
> 650-725-3383 (public fax; no confidential information, please)
> On 4/9/2017 12:23 PM, Baruch Atta baruchatta@... [regenrx] wrote:
>> Try A safety pin.☐
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>>
>> Yahoo! Groups
>> <https://groups.yahoo.com/neo;_ylc=X3oDMTJlMDltOGxxBF9TAzk3NDc2NTkwBGdycElkAzEzOTk2OTA3BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNnZnAEc3RpbWUDMTQ5MTcxOTk0NQ--->
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>> • Privacy
>> <https://info.yahoo.com/privacy/us/yahoo/groups/details.html> •
>> Unsubscribe
>> <mailto:regenrx-unsubscribe@yahoogroups.com?subject=Unsubscribe>
>> • Terms of Use <https://info.yahoo.com/legal/us/yahoo/utos/terms/>
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27919. Re: [regenrx] 2 to 5 pF antenna decouple capacitor

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-09 22:33:30 UTC
From: Michael
Topic: 27917 Message: 27919

Rob,

Your floating-diode build is obviously working well with the
Russian germanium diodes. The design is very sensitive, so with
an external aerial, very small C1 capacitance is required.
Even a gimmick will suffice (a few twists of insulated wire).
Too much capacitance will overload the detector. Experimentation
will determine the optimal value of C1 with your antenna.

Keep us posted on your findings!

MichaelUK
.....

On 09.04.17 23:08, Rob roomberg@... [regenrx] wrote:
>
>
> The KITCHIN regen calls for a 2 to 5 pF capacitor to decouple the
> antenna capacitance when using an
> outdoor antenna instead of a simple short whip antenna:
>
> http://www.learnmorsecode.com/regen/00regen.html
>
> Does the choice of a 2 ,3 ,4 or 5 pF capacitor make any impact on the
> circuit operation
> to the point where one should be used instead of the other?

27920. Re: [regenrx] what type wire should a galena cat whisker be made out of?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-09 22:37:57 UTC
From: Jordan Dobrikin
Topic: 27678 Message: 27920

Hi
"As good as any; better than most"
73 de Jordan ve7jjd

On Sun, Apr 9, 2017 at 3:15 PM, Rob roomberg@... [regenrx] <
regenrx@yahoogroups.com> wrote:

>
>
> I'm not repeating Pickard's investigating 30,000 combinations of wire and
> minerals for a patent.
> I'm just mounting some galena in a pretty holder and making a cat whisker
> ....probably with spring steel wire..... just because I have it already.
>
>
>
>
> On 04/09/2017 03:47 PM, Tom Lee tomlee@... [regenrx] wrote:
>
>
>
> By all means experiment with lots of ideas. Safety pins work well with
> carborundum, less well but serviceably with razor blades, and not too
> satisfactorily with galena.
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> --
> Prof. Thomas H. Lee
> Allen Bldg., CIS-205
> 420 Via Palou Mall
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> Stanford, CA 94305-4070http://www-smirc.stanford.edu650-725-3383 <(650)%20725-3383> (public fax; no
confidential information, please)
>
> On 4/9/2017 12:23 PM, Baruch Atta baruchatta@... [regenrx] wrote:
>
>
> Try A safety pin.☐
>
>
>
>
>
>

>
>
>
> [image: Yahoo! Groups]
> <https://groups.yahoo.com/neo;_ylc=X3oDMTJlMDltOGxxBF9TAzk3NDc2NTkwBGdycElkAzEzOTk2OTA3BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNnZnAEc3RpbWUDMTQ5MTcxOTk0NQ-->
>
> • Privacy <https://info.yahoo.com/privacy/us/yahoo/groups/details.html> •
> Unsubscribe <regenrx-unsubscribe@yahoogroups.com?subject=Unsubscribe> • Terms
> of Use <https://info.yahoo.com/legal/us/yahoo/utos/terms/>
>
> .
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>

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73 Jordan VE7JJD

27921. Re: [regenrx] 2 to 5 pF antenna decouple capacitor

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-09 22:40:49 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27917 Message: 27921

There is another possible approach for connecting an external antenna to
the Kitchin regenerative version with NPN transistors that works very well.

Prepare a double tuned top coupled bandpass input filter, using the
standard low impedance inductive coupling to the antenna...and couple to
the detector tank circuit with a very small variable insulated air
spaced capacitor.

You will notice immediately better reception of the short wave signals
because you are introducing FRONT END SELECTIVITY to your radio...

BTW... my Arnie Coro's PI network antenna tuner is also a good option
for the input from an external antenna to any radio or transceiver

73 and DX

Arnie Coro

CO2KK

Host of Dxers Unlimited radio hobby program at Radio Havana Cuba, on the
air Sundays and Monday's UTC days, and also on Tuesdays and Wednesdays
UTC days

On 09/04/17 18:33, Michael michael.setaazul@... [regenrx] wrote:
> Rob,
>
> Your floating-diode build is obviously working well with the
> Russian germanium diodes. The design is very sensitive, so with
> an external aerial, very small C1 capacitance is required.
> Even a gimmick will suffice (a few twists of insulated wire).
> Too much capacitance will overload the detector. Experimentation
> will determine the optimal value of C1 with your antenna.
>
> Keep us posted on your findings!
>
> MichaelUK
> ....
>
> On 09.04.17 23:08, Rob roomberg@... [regenrx] wrote:
>>
>> The KITCHIN regen calls for a 2 to 5 pF capacitor to decouple the
>> antenna capacitance when using an
>> outdoor antenna instead of a simple short whip antenna:
>>
>> http://www.learnmorsecode.com/regen/00regen.html
>>

>> Does the choice of a 2 ,3 ,4 or 5 pF capacitor make any impact on the
>> circuit operation
>> to the point where one should be used instead of the other?
>
> ------------------------------------
> Posted by: Michael <michael.setaazul@...>
> ------------------------------------
>
> "In the interest of Regenerating radio's lost art of Regeneration"
> ------------------------------------
>
> Yahoo Groups Links
>
>
>
>

27922. Re: [regenrx] 2 to 5 pF antenna decouple capacitor

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-09 22:44:19 UTC
From: Jordan Dobrikin
Topic: 27917 Message: 27922

Hi
I would suggest some type of passive Antenna Tuner and deleting said
Capacitor,
Radios are Tuned Circuits in Series the more the better.
73 de Jordan ve7jjd

On Sun, Apr 9, 2017 at 3:33 PM, Michael michael.setaazul@btopenworld.com
[regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> Rob,
>
> Your floating-diode build is obviously working well with the
> Russian germanium diodes. The design is very sensitive, so with
> an external aerial, very small C1 capacitance is required.
> Even a gimmick will suffice (a few twists of insulated wire).
> Too much capacitance will overload the detector. Experimentation
> will determine the optimal value of C1 with your antenna.
>
> Keep us posted on your findings!
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> MichaelUK
> ....
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> On 09.04.17 23:08, Rob roomberg@... [regenrx] wrote:
> >
> >
> > The KITCHIN regen calls for a 2 to 5 pF capacitor to decouple the
> > antenna capacitance when using an
> > outdoor antenna instead of a simple short whip antenna:
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> > http://www.learnmorsecode.com/regen/00regen.html
> >
> > Does the choice of a 2 ,3 ,4 or 5 pF capacitor make any impact on the
> > circuit operation
> > to the point where one should be used instead of the other?
>
>

--
73 Jordan VE7JJD

27923. Re: [regenrx] 2 to 5 pF antenna decouple capacitor

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-09 22:59:01 UTC
From: Rob
Topic: 27917 Message: 27923

I'm not looking to redesign the simple KITCHIN circuit.
I just want to know if 2 pF is and better or worse than 5pF when
choosing components.....
for this simple kid radio.

On 04/09/2017 06:40 PM, 'Prof. Arnaldo Coro Antich' coro@...
[regenrx] wrote:
>
> There is another possible approach for connecting an external antenna to
> the Kitchin regenerative version with NPN transistors that works very
> well.
>
> Prepare a double tuned top coupled bandpass input filter, using the
> standard low impedance inductive coupling to the antenna...and couple to
> the detector tank circuit with a very small variable insulated air
> spaced capacitor.
>
> You will notice immediately better reception of the short wave signals
> because you are introducing FRONT END SELECTIVITY to your radio...
>
> BTW... my Arnie Coro's PI network antenna tuner is also a good option
> for the input from an external antenna to any radio or transceiver
>
> 73 and DX
>
> Arnie Coro
>
> CO2KK
>
> Host of Dxers Unlimited radio hobby program at Radio Havana Cuba, on the
> air Sundays and Monday's UTC days, and also on Tuesdays and Wednesdays
> UTC days
>
> On 09/04/17 18:33, Michael michael.setaazul@... [regenrx]
> wrote:
> > Rob,
> >
> > Your floating-diode build is obviously working well with the
> > Russian germanium diodes. The design is very sensitive, so with
> > an external aerial, very small C1 capacitance is required.
> > Even a gimmick will suffice (a few twists of insulated wire).
> > Too much capacitance will overload the detector. Experimentation
> > will determine the optimal value of C1 with your antenna.
> >
> > Keep us posted on your findings!

> >
> > MichaelUK
> > .....
> >
> > On 09.04.17 23:08, Rob roomberg@... [regenrx] wrote:
> >>
> >> The KITCHIN regen calls for a 2 to 5 pF capacitor to decouple the
> >> antenna capacitance when using an
> >> outdoor antenna instead of a simple short whip antenna:
> >>
> >> http://www.learnmorsecode.com/regen/00regen.html
> >>
> >> Does the choice of a 2 ,3 ,4 or 5 pF capacitor make any impact on the
> >> circuit operation
> >> to the point where one should be used instead of the other?
> >
> > ------------------------------------
> > Posted by: Michael <michael.setaazul@...>
> > ------------------------------------
> >
> > "In the interest of Regenerating radio's lost art of Regeneration"
> > ------------------------------------
> >
> > Yahoo Groups Links
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27926. Re: [regenrx] 2 to 5 pF antenna decouple capacitor

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-09 23:23:11 UTC
From: Theosleaper
Topic: 27917 Message: 27926

No big deal. Six of one or half a dozen of the other. 2.2 - 4.7 is in
the zone.
I like 2.2pf.
Rick, k1wyh

On 4/9/2017 6:59 PM, Rob roomberg@... [regenrx] wrote:
>
> I'm not looking to redesign the simple KITCHIN circuit.
> I just want to know if 2 pF is and better or worse than 5pF when
> choosing components.....
> for this simple kid radio.
>
>
> On 04/09/2017 06:40 PM, 'Prof. Arnaldo Coro Antich' coro@...
> [regenrx] wrote:
>>
>> There is another possible approach for connecting an external antenna to
>> the Kitchin regenerative version with NPN transistors that works very
>> well.
>>
>> Prepare a double tuned top coupled bandpass input filter, using the
>> standard low impedance inductive coupling to the antenna...and couple to
>> the detector tank circuit with a very small variable insulated air
>> spaced capacitor.
>>
>> You will notice immediately better reception of the short wave signals
>> because you are introducing FRONT END SELECTIVITY to your radio...
>>
>> BTW... my Arnie Coro's PI network antenna tuner is also a good option
>> for the input from an external antenna to any radio or transceiver
>>
>> 73 and DX
>>
>> Arnie Coro
>>
>> CO2KK
>>
>> Host of Dxers Unlimited radio hobby program at Radio Havana Cuba, on the
>> air Sundays and Monday's UTC days, and also on Tuesdays and Wednesdays
>> UTC days
>>
>> On 09/04/17 18:33, Michael michael.setaazul@... [regenrx]
>> wrote:
>> > Rob,
>> >

>> > Your floating-diode build is obviously working well with the
>> > Russian germanium diodes. The design is very sensitive, so with
>> > an external aerial, very small C1 capacitance is required.
>> > Even a gimmick will suffice (a few twists of insulated wire).
>> > Too much capacitance will overload the detector. Experimentation
>> > will determine the optimal value of C1 with your antenna.
>> >
>> > Keep us posted on your findings!
>> >
>> > MichaelUK
>> > ....
>> >
>> > On 09.04.17 23:08, Rob roomberg@... [regenrx] wrote:
>> >>
>> >> The KITCHIN regen calls for a 2 to 5 pF capacitor to decouple the
>> >> antenna capacitance when using an
>> >> outdoor antenna instead of a simple short whip antenna:
>> >>
>> >> http://www.learnmorsecode.com/regen/00regen.html
>> >>
>> >> Does the choice of a 2 ,3 ,4 or 5 pF capacitor make any impact on the
>> >> circuit operation
>> >> to the point where one should be used instead of the other?
>> >
>> > ------------------------------------
>> > Posted by: Michael <michael.setaazul@...>
>> > ------------------------------------
>> >
>> > "In the interest of Regenerating radio's lost art of Regeneration"
>> > ------------------------------------
>> >
>> > Yahoo Groups Links
>> >
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>

27927. Re: [regenrx] 2 to 5 pF antenna decouple capacitor

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-09 23:28:14 UTC
From: Phil
Topic: 27917 Message: 27927

Well. . . Try them and find out, the fun's in the experimenting.

73 de Phil, KO6BB.
Specializing in DXing NDBs (Longwave Beacons).

Location: "The Beaconeer's Lair".
Merced, Central California, 37,18,37N 120,30,6W CM97rh
http://www.qsl.net/ko6bb/

HF/LF RADIOS:
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
PORTABLES: Realistic DX380, Grundig G6 Aviator, Grundig S450DLX
Icom: IC-7200 Xceiver, DSP IF & filters (~2015).
Kenwood: TS-450SAT Xceiver, cascaded 250/125Hz Inrad filters.

ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
Timewave DSP-599zx

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.
Cushcraft AR-10 Ringo at 14 feet AGL for 10M beacon.

On 4/9/2017 10:59 PM, Rob roomberg@... [regenrx] wrote:
>
> I'm not looking to redesign the simple KITCHIN circuit.
> I just want to know if 2 pF is and better or worse than 5pF when
> choosing components.....
> for this simple kid radio.
>

27928. Re: [regenrx] 2 to 5 pF antenna decouple capacitor

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-09 23:31:48 UTC
From: Michael
Topic: 27917 Message: 27928

Rob,

With an external antenna, start with 1 or 2 pF (or a gimmick)
for C1 and increase it to 5pF if needed. The optimal capacitance
before overload will largely depend on the length and height
of the external antenna.

MichaelUK
.....

On 09.04.17 23:59, Rob roomberg@... [regenrx] wrote:
>
> I'm not looking to redesign the simple KITCHIN circuit.
> I just want to know if 2 pF is and better or worse than 5pF when
> choosing components.....
> for this simple kid radio.

27929. RE: [regenrx] 2 to 5 pF antenna decouple capacitor

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-10 00:33:52 UTC
From: Hubert Miller
Topic: 27917 Message: 27929

I wondered about this before, Arnie, so thanks for your input. I wondered whether a two or even three tuned circuits, with no gain, in front of a regen detector would be a worthwhile circuit.
I suppose rather than the close-in selectivity, which the regeneration creates, extra tuned circuit or circuits would improve the regen ‘skirt selectivity’ for farther off in-band signals, which is where the regen falls down.
So do you think a tracking adjustment on the tuned circuit facing the antenna would be necessary, or is the overall bandpass effect great enough for the first tuned stage, with the second (or last) tuned circuit actually defining the working frequency?
-Hue
in very rainy grey Newport Oregon on the Left Coast

>There is another possible approach for connecting an external antenna to the Kitchin regenerative version with NPN transistors that works very well.

Prepare a double tuned top coupled bandpass input filter, using the standard low impedance inductive coupling to the antenna...and couple to the detector tank circuit with a very small variable insulated air spaced capacitor.

You will notice immediately better reception of the short wave signals because you are introducing FRONT END SELECTIVITY to your radio...

BTW... my Arnie Coro's PI network antenna tuner is also a good option for the input from an external antenna to any radio or transceiver

73 and DX

Arnie Coro

CO2KK

27930. KITCHIN version TWO heard Arnie in CUBA AGAIN!

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-10 03:36:48 UTC
From: Rob
Topic: 27930 Message: 27930

I had reworked the artwork to spread out crowded components.....
the goal being make it easier for kids who never soldered before.

And
as soon as I plugged in the 9 volt battery I heard CW.
I WAS surprised that I heard CW.
I had not found ANY CW using the first KITCHIN regen.
BUT
it was NOT CW QSOs ... it was the beginning of

Dxers Unlimited radio hobby show ....Radio Havana Cuba

so I recorded some of it.... Arnie talking about the PARASET rig:
http://www.learnmorsecode.com/regen/02REGENarnie.mp3

BIG smiles here.

http://www.learnmorsecode.com/regen/00regen.html

27931. Re: [regenrx] KITCHIN version TWO heard Arnie in CUBA AGAIN!

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-10 03:47:39 UTC
From: Jordan Dobrikin
Topic: 27930 Message: 27931

Hi
Is the new art work available?
73 de Jordan ve7jjd

On Sun, Apr 9, 2017 at 8:36 PM, Rob roomberg@... [regenrx] <
regenrx@yahoogroups.com> wrote:

>
>
> I had reworked the artwork to spread out crowded components.....
> the goal being make it easier for kids who never soldered before.
>
> And
> as soon as I plugged in the 9 volt battery I heard CW.
> I WAS surprised that I heard CW.
> I had not found ANY CW using the first KITCHIN regen.
> BUT
> it was NOT CW QSOs ... it was the beginning of
>
> Dxers Unlimited radio hobby show ....Radio Havana Cuba
>
> so I recorded some of it.... Arnie talking about the PARASET rig:
> http://www.learnmorsecode.com/regen/02REGENarnie.mp3
>
> BIG smiles here.
>
> http://www.learnmorsecode.com/regen/00regen.html
>
>
>

--
73 Jordan VE7JJD

27932. Re: [regenrx] KITCHIN version TWO heard Arnie in CUBA AGAIN!

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-10 03:52:49 UTC
From: Rob
Topic: 27930 Message: 27932

ALWAYS
I always share.
Go to
http://www.learnmorsecode.com/regen/00regen.html

Scroll down to the bottom of the page for the version TWO.

http://www.learnmorsecode.com/regen/02REGENkitchinPCBa9.jpg

NOTE THAT MY finished board has trimmer pots instead of outboard full
size pots.
I had to drill some extra holes and rearrange a 33uF cap but it all fit
fine.
I make copper traces 10 times fatter than really required so corrections
happen
without running out of copper.

On 04/09/2017 11:47 PM, Jordan Dobrikin jjdobrikin@... [regenrx]
wrote:
> Hi
> Is the new art work available?
> 73 de Jordan ve7jjd
>
> On Sun, Apr 9, 2017 at 8:36 PM, Rob roomberg@...
> <mailto:roomberg@...> [regenrx] <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>> wrote:
>
> I had reworked the artwork to spread out crowded components.....
> the goal being make it easier for kids who never soldered before.
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> And
> as soon as I plugged in the 9 volt battery I heard CW.
> I WAS surprised that I heard CW.
> I had not found ANY CW using the first KITCHIN regen.
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> it was NOT CW QSOs ... it was the beginning of
>
> Dxers Unlimited radio hobby show ....Radio Havana Cuba
>
> so I recorded some of it.... Arnie talking about the PARASET rig:
> http://www.learnmorsecode.com/regen/02REGENarnie.mp3
> <http://www.learnmorsecode.com/regen/02REGENarnie.mp3>
>
> BIG smiles here.
>
> http://www.learnmorsecode.com/regen/00regen.html

> <http://www.learnmorsecode.com/regen/00regen.html>
>
>
>
>
> --
> 73 Jordan VE7JJD
>

27933. sharing PCB artwork

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-10 04:39:31 UTC
From: Rob
Topic: 27930 Message: 27933

I don't know if this works for everybody but I found that if I right
mouse click on an image and save it
to my hard drive and then open it with an image viewer .... I get the
right size printed on my laser printer...
BUT
if I have my web browser print it I get a smaller image which is no good
for PCB printing.

I use yellow toner transfer paper. I think it costs 15 cents....
and fits 8 70mm X 100mm PCB images.....
so ..... between the cost of the yellow paper and 45 cent copper clad
board it costs about
50 cents to print a PCB.

This particular project regen was able to get away with dirt cheap
components... trimmer pots instead of full size pots........ and could
easily be built for less than two dollars for the PCB and components on
the PCB.

7 cent electrolytics ... one 10uf... two 33uf = 21 cents
1 cent ceramic caps.................. qty 6.......... = 6 cents
3 cent resistors.......................... qty 6...........= 6 cents
3 cent 1N4148 diode.................. qty 3..........= 9 cents
30 cents 5K trimmer pot...........qty 1..........= 30 cents
22 cents 150 trimmer pot...........qty 1.........= 22 cents
1 cent 2N2222A transistor...........qty 3......... = 3 cents
10 cents germanium diode D9B qty 1....... = 10 cents

The only "expensive" part is the variable capacitor and they can be
bought for under $3.00.

http://www.learnmorsecode.com/laminator/hotcakes.html

On 04/09/2017 11:52 PM, Rob roomberg@... [regenrx] wrote:
>
> ALWAYS
> I always share.
> Go to
> http://www.learnmorsecode.com/regen/00regen.html
>
> Scroll down to the bottom of the page for the version TWO.
>
> http://www.learnmorsecode.com/regen/02REGENkitchinPCBa9.jpg
>
> NOTE THAT MY finished board has trimmer pots instead of outboard full
> size pots.

> I had to drill some extra holes and rearrange a 33uF cap but it all
> fit fine.
> I make copper traces 10 times fatter than really required so
> corrections happen
> without running out of copper.
>
>
>
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> wrote:
>> Hi
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>> 73 de Jordan ve7jjd
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>> On Sun, Apr 9, 2017 at 8:36 PM, Rob roomberg@...
>> <mailto:roomberg@...> [regenrx] <regenrx@yahoogroups.com
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>> I had reworked the artwork to spread out crowded components.....
>> the goal being make it easier for kids who never soldered before.
>>
>> And
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>> I WAS surprised that I heard CW.
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>> BUT
>> it was NOT CW QSOs ... it was the beginning of
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>> so I recorded some of it.... Arnie talking about the PARASET rig:
>> http://www.learnmorsecode.com/regen/02REGENarnie.mp3
>> <http://www.learnmorsecode.com/regen/02REGENarnie.mp3>
>>
>> BIG smiles here.
>>
>> http://www.learnmorsecode.com/regen/00regen.html
>> <http://www.learnmorsecode.com/regen/00regen.html>
>>
>>
>>
>>
>> --
>> 73 Jordan VE7JJD
>
>

27934. Re: [regenrx] sharing PCB artwork

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-10 05:02:21 UTC
From: Jordan Dobrikin
Topic: 27930 Message: 27934

Hi
From following the messages it seems that the circuit boards have been made in quantity.
Would any be available for me and my Senior Citizens SWL/Scanner Club.
We have a side project of building some Steampunk Radios with Vintage/Antique components, Variometers, Variocouplers, Variable Condenser/Coil Assemblies with modern semiconductors and circuits.
We use Breadboard techniques so we get an Object de Art with a highly functional radio.
Basically Crystal Radios and one or two active stages.
We also have a Radiola III & IIA with regenerative coils to use with circuit board.
We can use either the old or new board(s) How much for three to six Boards?
Thanx
73 de Jordan ve7jjd

On Sun, Apr 9, 2017 at 9:39 PM, Rob roomberg@... [regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> I don't know if this works for everybody but I found that if I right mouse
> click on an image and save it
> to my hard drive and then open it with an image viewer .... I get the
> right size printed on my laser printer...
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> and fits 8 70mm X 100mm PCB images.....
> so ..... between the cost of the yellow paper and 45 cent copper clad
> board it costs about
> 50 cents to print a PCB.
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> This particular project regen was able to get away with dirt cheap
> components... trimmer pots instead of full size pots..... and could
> easily be built for less than two dollars for the PCB and components on
> the PCB.
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> 7 cent electrolytics ... one 10uf... two 33uf = 21 cents
> 1 cent ceramic caps..... qty 6..... = 6 cents
> 3 cent resistors..... qty 6.....= 6 cents
> 3 cent 1N4148 diode..... qty 3.....= 9 cents

> 30 cents 5K trimmer pot..........qty 1.........= 30 cents
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> 1 cent 2N2222A transistor..........qty 3......... = 3 cents
> 10 cents germanium diode D9B qty 1....... = 10 cents
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>
> The only "expensive" part is the variable capacitor and they can be
> bought for under $3.00.
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> http://www.learnmorsecode.com/laminator/hotcakes.html
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> On 04/09/2017 11:52 PM, Rob roomberg@... [regenrx] wrote:
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> ALWAYS
> I always share.
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> NOTE THAT MY finished board has trimmer pots instead of outboard full size
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> On 04/09/2017 11:47 PM, Jordan Dobrikin jjdobrikin@gmail.com [regenrx]
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> Is the new art work available?
> 73 de Jordan ve7jjd
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> On Sun, Apr 9, 2017 at 8:36 PM, Rob roomberg@... [regenrx] <
> <regenrx@yahoogroups.com>regenrx@yahoogroups.com> wrote:
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>> it was NOT CW QSOs ... it was the beginning of
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>> Dxers Unlimited radio hobby show ....Radio Havana Cuba
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>> BIG smiles here.
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>> http://www.learnmorsecode.com/regen/00regen.html
>>
>>
>
>
> --
> 73 Jordan VE7JJD
>
>
>
>
>

--
73 Jordan VE7JJD

27935. Re: [regenrx] sharing PCB artwork

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-10 05:21:46 UTC
From: Rob
Topic: 27930 Message: 27935

On 04/10/2017 01:02 AM, Jordan Dobrikin jjdobrikin@... [regenrx]
wrote:
> Hi
> From following the messages it seems that the circuit boards have been
> made in quantity.
> Would any be available for me and my Senior Citizens SWL/Scanner Club.
Yes.
Give me your mailing address.

> We have a side project of building some Steampunk Radios with
> Vintage/Antique components, Variometers,
> Variocouplers, Variable Condenser/Coil Assemblies with modern
> semiconductors and circuits.
> We use Breadboard techniques so we get an Object de Art with a highly
> functional radio.
> Basically Crystal Radios and one or two active stages.
> We also have a Radiola III & IIA with regenerative coils to use with
> circuit board.
> We can use either the old or new board(s) How much for three to six
> Boards?
> Thanx
> 73 de Jordan ve7jjd
>
> On Sun, Apr 9, 2017 at 9:39 PM, Rob roomberg@...
> <mailto:roomberg@...> [regenrx] <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>> wrote:
>
> I don't know if this works for everybody but I found that if I
> right mouse click on an image and save it
> to my hard drive and then open it with an image viewer .... I get
> the right size printed on my laser printer...
> BUT
> if I have my web browser print it I get a smaller image which is
> no good for PCB printing.
>
> I use yellow toner transfer paper. I think it costs 15 cents....
> and fits 8 70mm X 100mm PCB images.....
> so ..... between the cost of the yellow paper and 45 cent copper
> clad board it costs about
> 50 cents to print a PCB.
>
> This particular project regen was able to get away with dirt cheap
> components... trimmer pots instead of full size pots........ and
> could easily be built for less than two dollars for the PCB and
> components on the PCB.

>
> 7 cent electrolytics ... one 10uf... two 33uf = 21 cents
> 1 cent ceramic caps..... qty 6..... = 6 cents
> 3 cent resistors..... qty 6.....= 6
> cents
> 3 cent 1N4148 diode..... qty 3.....= 9 cents
> 30 cents 5K trimmer pot.....qty 1.....= 30 cents
> 22 cents 150 trimmer pot.....qty 1.....= 22 cents
> 1 cent 2N2222A transistor.....qty 3..... = 3 cents
> 10 cents germanium diode D9B qty 1..... = 10 cents
>
> The only "expensive" part is the variable capacitor and they can
> be bought for under $3.00.
>
>
> http://www.learnmorsecode.com/laminator/hotcakes.html
> <http://www.learnmorsecode.com/laminator/hotcakes.html>
>
> On 04/09/2017 11:52 PM, Rob roomberg@...
> <mailto:roomberg@...> [regenrx] wrote:
>>
>> ALWAYS
>> I always share.
>> Go to
>> http://www.learnmorsecode.com/regen/00regen.html
>> <http://www.learnmorsecode.com/regen/00regen.html>
>>
>> Scroll down to the bottom of the page for the version TWO.
>>
>> http://www.learnmorsecode.com/regen/02REGENkitchinPCBa9.jpg
>> <http://www.learnmorsecode.com/regen/02REGENkitchinPCBa9.jpg>
>>
>> NOTE THAT MY finished board has trimmer pots instead of outboard
>> full size pots.
>> I had to drill some extra holes and rearrange a 33uF cap but it
>> all fit fine.
>> I make copper traces 10 times fatter than really required so
>> corrections happen
>> without running out of copper.
>>
>>
>>
>> On 04/09/2017 11:47 PM, Jordan Dobrikin jjdobrikin@...
>> <mailto:jjdobrikin@...> [regenrx] wrote:
>>> Hi
>>> Is the new art work available?
>>> 73 de Jordan ve7jjd
>>>
>>> On Sun, Apr 9, 2017 at 8:36 PM, Rob roomberg@...
>>> <mailto:roomberg@...> [regenrx] <regenrx@yahoogroups.com

>>> <mailto:regenrx@yahoogroups.com>> wrote:
>>>
>>> I had reworked the artwork to spread out crowded components.....
>>> the goal being make it easier for kids who never soldered
>>> before.
>>>
>>> And
>>> as soon as I plugged in the 9 volt battery I heard CW.
>>> I WAS surprised that I heard CW.
>>> I had not found ANY CW using the first KITCHIN regen.
>>> BUT
>>> it was NOT CW QSOs ... it was the beginning of
>>>
>>> Dxers Unlimited radio hobby show ....Radio Havana Cuba
>>>
>>> so I recorded some of it.... Arnie talking about the PARASET
>>> rig:
>>> http://www.learnmorsecode.com/regen/02REGENarnie.mp3
>>> <http://www.learnmorsecode.com/regen/02REGENarnie.mp3>
>>>
>>> BIG smiles here.
>>>
>>> http://www.learnmorsecode.com/regen/00regen.html
>>> <http://www.learnmorsecode.com/regen/00regen.html>
>>>
>>>
>>>
>>>
>>> --
>>> 73 Jordan VE7JJD
>>
>
>
>
>
> --
> 73 Jordan VE7JJD
>

27936. Re: [regenrx] sharing PCB artwork

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-10 06:00:43 UTC
From: Jordan Dobrikin
Topic: 27930 Message: 27936

Hi
Thanx

Jordan Dobrikin
809-1850 Rosser Ave.
Burnaby British Columbia
Canada V5C 5E1

73 de Jordan ve7jjd

On Sun, Apr 9, 2017 at 10:21 PM, Rob roomberg@... [regenrx] <
regenrx@yahoogroups.com> wrote:

>
>
> On 04/10/2017 01:02 AM, Jordan Dobrikin jjdobrikin@... [regenrx]
> wrote:
>
>
> Hi
> From following the messages it seems that the circuit boards have been
> made in quantity.
> Would any be available for me and my Senior Citizens SWL/Scanner Club.
>
> Yes.
> Give me your mailing address.
>
>
> We have a side project of building some Steampunk Radios with
> Vintage/Antique components, Variometers,
> Variocouplers, Variable Condenser/Coil Assemblies with modern
> semiconductors and circuits.
> We use Breadboard techniques so we get an Object de Art with a highly
> functional radio.
> Basically Crystal Radios and one or two active stages.
> We also have a Radiola III & IIA with regenerative coils to use with
> circuit board.
> We can use either the old or new board(s) How much for three to six Boards?
> Thanx
> 73 de Jordan ve7jjd
>
> On Sun, Apr 9, 2017 at 9:39 PM, Rob roomberg@... [regenrx] <
> regenrx@yahoogroups.com> wrote:
>
>>
>>

>> I don't know if this works for everybody but I found that if I right
>> mouse click on an image and save it
>> to my hard drive and then open it with an image viewer .... I get the
>> right size printed on my laser printer...
>> BUT
>> if I have my web browser print it I get a smaller image which is no good
>> for PCB printing.
>>
>> I use yellow toner transfer paper. I think it costs 15 cents....
>> and fits 8 70mm X 100mm PCB images.....
>> so ..... between the cost of the yellow paper and 45 cent copper clad
>> board it costs about
>> 50 cents to print a PCB.
>>
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>> components... trimmer pots instead of full size pots........ and could
>> easily be built for less than two dollars for the PCB and components on
>> the PCB.
>>
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>> 1 cent ceramic caps..... qty 6..... = 6 cents
>> 3 cent resistors..... qty 6.....= 6 cents
>> 3 cent 1N4148 diode..... qty 3.....= 9 cents
>> 30 cents 5K trimmer pot.....qty 1.....= 30 cents
>> 22 cents 150 trimmer pot.....qty 1.....= 22 cents
>> 1 cent 2N2222A transistor.....qty 3..... = 3 cents
>> 10 cents germanium diode D9B qty 1..... = 10 cents
>>
>>
>> The only "expensive" part is the variable capacitor and they can be
>> bought for under $3.00.
>>
>>
>> http://www.learnmorsecode.com/laminator/hotcakes.html
>>
>> On 04/09/2017 11:52 PM, Rob <roomberg@...>roomberg@... [regenrx]
>> wrote:
>>
>>
>>
>> ALWAYS
>> I always share.
>> Go to
>> http://www.learnmorsecode.com/regen/00regen.html
>>
>> Scroll down to the bottom of the page for the version TWO.
>>
>> http://www.learnmorsecode.com/regen/02REGENkitchinPCBa9.jpg
>>
>> NOTE THAT MY finished board has trimmer pots instead of outboard full

>> size pots.
>> I had to drill some extra holes and rearrange a 33uF cap but it all fit
>> fine.
>> I make copper traces 10 times fatter than really required so corrections
>> happen
>> without running out of copper.
>>
>>
>>
>> On 04/09/2017 11:47 PM, Jordan Dobrikin <jjdobrikin@...>
>> jjdobrikin@... [regenrx] wrote:
>>
>>
>> Hi
>> Is the new art work available?
>> 73 de Jordan ve7jjd
>>
>> On Sun, Apr 9, 2017 at 8:36 PM, Rob <roomberg@...>roomberg@...
>> [regenrx] < <regenrx@yahoogroups.com>regenrx@yahoogroups.com> wrote:
>>
>>>
>>>
>>> I had reworked the artwork to spread out crowded components.....
>>> the goal being make it easier for kids who never soldered before.
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>>> And
>>> as soon as I plugged in the 9 volt battery I heard CW.
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>>> so I recorded some of it.... Arnie talking about the PARASET rig:
>>> <http://www.learnmorsecode.com/regen/02REGENarnie.mp3>
>>> http://www.learnmorsecode.com/regen/02REGENarnie.mp3
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>>> BIG smiles here.
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>>> <http://www.learnmorsecode.com/regen/00regen.html>
>>> http://www.learnmorsecode.com/regen/00regen.html
>>>
>>>
>>
>>
>> --
>> 73 Jordan VE7JJD
>>
>>

>>
>>
>
>
> --
> 73 Jordan VE7JJD
>
>
>
>

--
73 Jordan VE7JJD

27937. Re: [regenrx] 2 to 5 pF antenna decouple capacitor

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-13 00:18:11 UTC
From: kevin asato
Topic: 27917 Message: 27937

How about 2 pieces of insulated wire about 2 inches long. insulation can be plastic or enamel. doesn't really matter in the long run.Adjust the capacitance by the amount of twists in the wire; more twists == more capacitance. Also known as a gimmick capacitor. The 2" is random. It provides enough wire to grip while twisting. One or two twists should get you in the ball park of something 2 to 5pf, more or less. No need to be precise at it allows for coupling the antenna to the radio.

73,
kevin
kc6pob

Well. . . Try them and find out, the fun's in
the experimenting.

73 de Phil, KO6BB.

Specializing in DXing NDBs (Longwave Beacons).

27938. D9B D9K D2D Russian diodes

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-13 04:29:37 UTC
From: Rob
Topic: 27938 Message: 27938

After success with the D9B diodes I poked around EBAY and found more 5 cent Russian germanium diodes.
Not really knowing what to expect I ordered D9K and D2D diodes, just to experiment.
They are labeled:
D9B USSR Germanium Detector Diode 10V 40ma 100 KHz
D9K USSR Germanium Detector Diode 30V 30ma 100 KHz
D2D USSR Germanium Detector Diode 50V 16ma 150 MHz
Any thoughts here?
I'm just looking at replacing the 1N34A diode in simple crystal radios and the KITCHIN simple regen.

27939. Re: [regenrx] D9B D9K D2D Russian diodes

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-13 04:51:21 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27938 Message: 27939

Hola amigo the D2D and similar high frequencies capable diodes were used as video detectors in Soviet days TV set like Krim 206 , Rubin 205 and Elektron 205 black and white sets with 23 inches picture tubes.

Have you ever heard about the ¨ Voltage Quadrupler detector ¨ published in SPRAT the British QRP Club magazine ?

At the low price of 10 cents each, it would be interesting to experiment with that detector configuration and learn if it increases de audio output on the crystal set.

Ben Tonque of Blonder Tonque Laboratories published extensive experimental work with crystal radios, worth all the time reading those very well written highly technical papers.

I read one once , enjoyed it a lot, but could not download others that Ben also wrote. BTW, I understand that not too long ago he passed away. Never knew if he was an amateur radio operator .

73 and DX

Arnie Coro CO2KK

On 13/04/17 00:29, Rob roomberg@... [regenrx] wrote:
>
>
> After success with the D9B diodes I poked around EBAY and found more 5
> cent Russian germanium diodes.
> Not really knowing what to expect I ordered D9K and D2D diodes, just
> to experiment.
> They are labeled:
> D9B USSR Germanium Detector Diode 10V 40ma 100 KHz
> D9K USSR Germanium Detector Diode 30V 30ma 100 KHz
> D2D USSR Germanium Detector Diode 50V 16ma 150 MHz
> Any thoughts here?
> I'm just looking at replacing the 1N34A diode in simple crystal radios
> and the KITCHIN simple regen.
>
>
>
>

27940. Re: D9B D9K D2D Russian diodes

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-13 05:23:12 UTC
From: mikhail-vulkov@...
Topic: 27938 Message: 27940

Russian diodes type D9 are tested as rectifier by the manufacturer at two frequencies: 0.1 MHz and 40 MHz. The frequency 0,1MHz is used as reference. The ratio of rectified currents should be no less than 0.6.

27941. KITCHIN regen version 3

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-15 05:58:15 UTC
From: Rob
Topic: 27941 Message: 27941

KITCHIN regen version 3:

All parts spaced for newbies:

http://www.learnmorsecode.com/regen/03REGEN.jpg

The goal was to make a repeatable dirt cheap short wave receiver for scouts.

No real difference between versions 1,2 and 3.
Just stretched the parts spacing to be easier for newbies to solder.

All three versions heard Radio Havana Cuba.... 1,300 miles away from here.

http://www.learnmorsecode.com/regen/00regen.html

27942. Re: [regenrx] KITCHIN regen version 3

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-15 08:28:43 UTC
From: Michael
Topic: 27941 Message: 27942

This looks really good, Rob!

Do you notice any difference in performance
between 1N34A and D9B germanium diodes - even
from the same batch?

MichaelUK
.....

On 15.04.17 06:58, Rob roomberg@... [regenrx] wrote:
>
>
> KITCHIN regen version 3:
>
> All parts spaced for newbies:
>
> http://www.learnmorsecode.com/regen/03REGEN.jpg
>
> The goal was to make a repeatable dirt cheap short wave receiver for scouts.
>
> No real difference between versions 1,2 and 3.
> Just stretched the parts spacing to be easier for newbies to solder.
>
> All three versions heard Radio Havana Cuba.... 1,300 miles away from here.
>
> http://www.learnmorsecode.com/regen/00regen.html

> Posted by: Rob <roomberg@...>

27943. The new printed circuit for easier assembly of the 3 NPN transistors Kitchin regenerative

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-15 17:42:57 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27943 Message: 27943

Dear amigo Rob:

A lot easier not only for kids, but also for old timers ... a very good idea to design a ¨wide spaced¨ circuit board.

Could you please send the side where the copper traces are ?

The photo of the upper side with the parts came in very nicely !!!

Has anyone tried to use an LM317 variable regulator instead of the 3 silicon diodes ?

Perhaps the radio can be further optimized by finding out the optimum voltage supplied to the NPN transistor.

It is quite clear that each diode will ¨regulate at around 700 millivolts, so three in series should provide about 2.1 volts to the circuit. The LM317 can regulate down to 1.3 or 1.4 volts, so it will also do around 2.0 volts... You can then experiment and find out if a somewhat higher or lower voltage will make any difference in the performance of the receiver...

And YES... I am aware that adding the LM317 to replace the 3 silicon diodes is not a good idea for a receiver project that aims at simplicity and low cost...

73 and DX

Arnie Coro
CO2KK

27944. Re: [regenrx] The new printed circuit for easier assembly of the 3 NPN transistors Kitchin regenerative

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-15 19:12:48 UTC
From: Jordan Dobrikin
Topic: 27943 Message: 27944

Hi

Speaking of "changes" I am planning on replacing the Tank Tuning Feedback components with Antique/Vintage components: (*L1)* Coils & Variometers that have Tickler Winding's and larger (*C2)* Tuning Capacitor to match the Antique Inductors.

Also noticed a typo error third paragraph "Rallows" R1 allows?
73 de Jordan ve7jjd

Hi

Thanx
73 de Jordan ve7jjd

On Sat, Apr 15, 2017 at 10:42 AM, 'Prof. Arnaldo Coro Antich' coro@... [regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> Dear amigo Rob:
>
> A lot easier not only for kids, but also for old timers ... a very good
> idea to design a ¨wide spaced¨ circuit board.
>
> Could you please send the side where the copper traces are ?
>
> The photo of the upper side with the parts came in very nicely !!!
>
> Has anyone tried to use an LM317 variable regulator instead of the 3
> silicon diodes ?
>
> Perhaps the radio can be further optimized by finding out the optimum
> voltage supplied to the NPN transistor.
>
> It is quite clear that each diode will ¨regulate at around 700
> millivolts, so three in series should provide about 2.1 volts to the
> circuit. The LM317 can regulate down to 1.3 or 1.4 volts, so it will
> also do around 2.0 volts... You can then experiment and find out if a
> somewhat higher or lower voltage will make any difference in the
> performance of the receiver...
>
> And YES... I am aware that adding the LM317 to replace the 3 silicon
> diodes is not a good idea for a receiver project that aims at simplicity
> and low cost...

>
> 73 and DX
>
> Arnie Coro
> CO2KK
>
>
>

27945. Re: [regenrx] The new printed circuit for easier assembly of the 3 NPN transistors Kitchin regenerative

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-15 21:14:21 UTC
From: Rob
Topic: 27943 Message: 27945

SHARE PICTURES and schematics if you change anything.

Rallows user control for regeneration..... is R2 150K pot.

I did not write the PDF so typos and all... the JPG is the same as when
it was first written.
....

Arnie...copper traces side:
http://www.learnmorsecode.com/regen/03batch1.jpg
http://www.learnmorsecode.com/regen/00regen.html

I did not do any performance experiments.
I simply created it per the instructions. My deviations were by advice
and parts on hand.
Like version 3 uses 1N4454 instead of 1N4148.

I see LM317 is readily available for 10 cents.... so cost really is not
an issue.....
so....
just out of curiosity can anyone modify the circuit ...take a picture
and show me how that gets wired.

If the performance is vastly improved then I would use it.

On 04/15/2017 03:12 PM, Jordan Dobrikin jjdobrikin@... [regenrx]
wrote:
> Hi
>
> Speaking of "changes" I am planning on replacing the Tank Tuning
> Feedback components with Antique/Vintage components: (*L1)* Coils &
> Variometers that have Tickler Winding's and larger (*C2)* Tuning
> Capacitor to match the Antique Inductors.
>
> Also noticed a typo error third paragraph "Rallows" R1 allows?
> 73 de Jordan ve7jjd
>
> Hi
>
>
>
>
> Thanx
> 73 de Jordan ve7jjd
>

> On Sat, Apr 15, 2017 at 10:42 AM, 'Prof. Arnaldo Coro Antich'
> coro@... <mailto:coro@...> [regenrx] <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>> wrote:
>
> Dear amigo Rob:
>
> A lot easier not only for kids, but also for old timers ... a very
> good
> idea to design a ¨wide spaced¨ circuit board.
>
> Could you please send the side where the copper traces are ?
>
> The photo of the upper side with the parts came in very nicely !!!
>
> Has anyone tried to use an LM317 variable regulator instead of the 3
> silicon diodes ?
>
> Perhaps the radio can be further optimized by finding out the optimum
> voltage supplied to the NPN transistor.
>
> It is quite clear that each diode will ¨regulate at around 700
> millivolts, so three in series should provide about 2.1 volts to the
> circuit. The LM317 can regulate down to 1.3 or 1.4 volts, so it will
> also do around 2.0 volts... You can then experiment and find out if a
> somewhat higher or lower voltage will make any difference in the
> performance of the receiver...
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> And YES... I am aware that adding the LM317 to replace the 3 silicon
> diodes is not a good idea for a receiver project that aims at
> simplicity
> and low cost...
>
> 73 and DX
>
> Arnie Coro
> CO2KK
>
>
>
> --
> P

27946. Re: [regenrx] KITCHIN regen version 3

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-15 21:15:51 UTC
From: Rob
Topic: 27941 Message: 27946

I can't tell any difference.
And I did swap out 6 D9B diodes to see if they all worked and all gave
the same good results.

On 04/15/2017 04:28 AM, Michael michael.setaazul@...
[regenrx] wrote:
>
> This looks really good, Rob!
>
> Do you notice any difference in performance
> between 1N34A and D9B germanium diodes - even
> from the same batch?
>
> MichaelUK
> ....
>
> On 15.04.17 06:58, Rob roomberg@... [regenrx] wrote:
> >
> >
> > KITCHIN regen version 3:
> >
> > All parts spaced for newbies:
> >
> > http://www.learnmorsecode.com/regen/03REGEN.jpg
> >
> > The goal was to make a repeatable dirt cheap short wave receiver for
> scouts.
> >
> > No real difference between versions 1,2 and 3.
> > Just stretched the parts spacing to be easier for newbies to solder.
> >
> > All three versions heard Radio Havana Cuba.... 1,300 miles away from
> here.
> >
> > http://www.learnmorsecode.com/regen/00regen.html
>
> > Posted by: Rob <roomberg@...>
>
>

27947. Re: [regenrx] KITCHIN regen version 3

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-15 21:31:35 UTC
From: Michael
Topic: 27941 Message: 27947

That is very encouraging, Rob!

I must rebuild my original and try more germanium diodes.
I have an assortment of uncertain origin from scrap
tag-strips etc. The quality of the germanium diode
would seem to be the determinant factor, which must
be why Kitchin reported his success.

I am sure your scouts will learn a lot from your
perseverence. That is the essence of "amateur" radio.
Hopefully your endeavours will enthuse many future hams!

MichaelUK
.....

On 15.04.17 22:15, Rob roomberg@... [regenrx] wrote:
>
> I can't tell any difference.
> And I did swap out 6 D9B diodes to see if they all worked and all gave
> the same good results.
>
> On 04/15/2017 04:28 AM, Michael michael.setaazul@...
> [regenrx] wrote:
>>
>> This looks really good, Rob!
>>
>> Do you notice any difference in performance
>> between 1N34A and D9B germanium diodes - even
>> from the same batch?
>>
>> MichaelUK
>> .....

27948. Re: [regenrx] KITCHIN version TWO heard Arnie in CUBA AGAIN!

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-19 16:48:25 UTC
From: Baruch Atta
Topic: 27930 Message: 27948

Is the Kitchin Regen being offered as a Kit or a PC board?

Joe W3TTT

On Sun, Apr 9, 2017 at 11:36 PM, Rob roomberg@... [regenrx] <
regenrx@yahoogroups.com> wrote:

>
>
> I had reworked the artwork to spread out crowded components.....
> the goal being make it easier for kids who never soldered before.
>
> And
> as soon as I plugged in the 9 volt battery I heard CW.
> I WAS surprised that I heard CW.
> I had not found ANY CW using the first KITCHIN regen.
> BUT
> it was NOT CW QSOs ... it was the beginning of
>
> Dxers Unlimited radio hobby show ....Radio Havana Cuba
>
> so I recorded some of it.... Arnie talking about the PARASET rig:
> http://www.learnmorsecode.com/regen/02REGENarnie.mp3
>
> BIG smiles here.
>
> http://www.learnmorsecode.com/regen/00regen.html
>
>
>

27949. Re: [regenrx] KITCHIN version TWO heard Arnie in CUBA AGAIN!

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-19 19:14:36 UTC
From: Rob
Topic: 27930 Message: 27949

Its not a kit.
Its an experiment.
I'm looking for something to share with scouts... or anybody... any age....
that is dirt cheap to build using the cheapest parts.
I'm not selling kits.
But I will mail a PCB to you.

all I want in return is pictures of anything you build to share with
newbies.

Do you have the ability to drill the component holes?

Give me your mailing address.

On 04/19/2017 12:48 PM, Baruch Atta baruchatta@... [regenrx] wrote:
> Is the Kitchin Regen being offered as a Kit or a PC board?
>
> Joe W3TTT
>
> On Sun, Apr 9, 2017 at 11:36 PM, Rob roomberg@...
> <mailto:roomberg@...> [regenrx] <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>> wrote:
>
> I had reworked the artwork to spread out crowded components.....
> the goal being make it easier for kids who never soldered before.
>
> And
> as soon as I plugged in the 9 volt battery I heard CW.
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> it was NOT CW QSOs ... it was the beginning of
>
> Dxers Unlimited radio hobby show ....Radio Havana Cuba
>
> so I recorded some of it.... Arnie talking about the PARASET rig:
> http://www.learnmorsecode.com/regen/02REGENarnie.mp3
> <http://www.learnmorsecode.com/regen/02REGENarnie.mp3>
>
> BIG smiles here.
>
> http://www.learnmorsecode.com/regen/00regen.html
> <http://www.learnmorsecode.com/regen/00regen.html>
>
>
>

27950. Adding an RF amplifier?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-20 14:55:00 UTC
From: rhulett1@...
Topic: 27950 Message: 27950

I am looking for a circuit to isolate the antenna from the detector in my 2 tube regen from Aug 1951, similar to the National SW-3. Mine uses a 12SJ7/12SL7. Does anyone have suggestions for adding RF amplification? Maybe someone has already built something like this. Any circuit advice for this? I hope to use the existing chassis as a basis for 3 tube.

73, Curt KB5JO

27951. Re: [regenrx] Adding an RF amplifier?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-20 15:28:27 UTC
From: Bill Cromwell
Topic: 27950 Message: 27951

Hi maybe you can find space for an additional tube - 6C4 - and the additional coil/per band. You can rewire the 12 volt tube for 6 volts on the heaters. You will also need a dual ganged tuning cap (two identical sections) and it may need additional space. Those things can all be accommodated in a new build but might be more difficult if you are modifying an existing radio. I would like to revisit the 6SN7 regen from the old handbooks and build it with the rf amp. I have an SW-3 here and it is a pleasure to use. So you can see that I have less motivation to build the receiver you are talking about.

Good luck with your project. Please keep us posted.

73,

Bill KU8H

On 04/20/2017 10:55 AM, rhulett1@... [regenrx] wrote:
>
> I am looking for a circuit to isolate the antenna from the detector in
> my 2 tube regen from Aug 1951, similar to the National SW-3. Mine
> uses a 12SJ7/12SL7. Does anyone have suggestions for adding RF
> amplification? Maybe someone has already built something like this.
> Any circuit advice for this? I hope to use the existing chassis as a
> basis for 3 tube.
>
> 73, Curt KB5JO
>
>
>

--
bark less - wag more

27952. Re: [regenrx] Adding an RF amplifier?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-20 15:41:16 UTC
From: Sam Neal
Topic: 27950 Message: 27952

Hello,

I have a good condition National SW-3, with 20 meter coils only and am looking for a reputable restoration technician to go through it for me. Age/heaing/eye-sight are catching up with me so I will not attempt to do it myself.

If anyone could recommend someone to me to do this, I would appreciate any input/experiences you have had with the person you may recommend.

Any input would be appreciated - along with a source for a 40 meter coil and an 80 meter coil.

73,

Sam Neal N5AF

I have an SW-3 here and
it is a pleasure to use. So you can see that I have less motivation to build the receiver you are talking about.

Good luck with your project. Please keep us posted.

73,

Bill KU8H

On 04/20/2017 10:55 AM, rhulett1@... [regenrx] wrote:
>
> I am looking for a circuit to isolate the antenna from the detector in
> my 2 tube regen from Aug 1951, similar to the National SW-3. Mine
> uses a 12SJ7/12SL7. Does anyone have suggestions for adding RF
> amplification? Maybe someone has already built something like this.
> Any circuit advice for this? I hope to use the existing chassis as a
> basis for 3 tube.
>
> 73, Curt KB5JO
>
>
>

--
bark less - wag more

27953. Re: [regenrx] Adding an RF amplifier?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-20 15:18:09 UTC
From: Lee
Topic: 27950 Message: 27953
Attachments: 1 described; binary payloads are missing from this source WARC

Curt,

On the PARASET, the top of the detector's link coil goes through a
series 100pf capacitor to the SPDT switch which connects the antenna to
either the receiver link or to the transmitter. So will

This work for yo? It also has no rf amp.

Lee

On 4/20/2017 9:55 AM, rhulett1@... [regenrx] wrote:
>
> I am looking for a circuit to isolate the antenna from the detector in
> my 2 tube regen from Aug 1951, similar to the National SW-3. Mine
> uses a 12SJ7/12SL7. Does anyone have suggestions for adding RF
> amplification? Maybe someone has already built something like this.
> Any circuit advice for this? I hope to use the existing chassis as a
> basis for 3 tube.
>
> 73, Curt KB5JO
>
>
>

27954. Re: [regenrx] Adding an RF amplifier?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-20 15:56:52 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27950 Message: 27954

Dear amigo....

A very easy to put in practice circuit to isolate the antenna from the regenerative detector stage is a simple grounded grid triode amplifier stage...

Any triode or triode connected tube will do the job !
My prototype regenerative that has proven to be very effective uses a 6AK5 pentode with the screen grid connected to the plate and the control grid connected directly to ground.

The cathode acts as the signal input electrode...I use a little trick to connect a 1000 ohms carbon potentiometer so that it will act as a cathode resistor for the grounded grid stage, and at the same time it is used as a primitive yet effective RF signal attenuator... Connect the good quality carbon track potentiometer (you can also use a wirewound potentiometer of good quality , because the inductance of the high resistance per unit length wire is negligible at short wave frequencies) Connect the bottom of the potentiometer to ground, the top goes to the cathode of the triode tube and the center connection goes to a small capacitor to the antenna... The capacitance of that capacitor leaves a lot of room for experimenting !!! The plate circuit of my grounded grid amplifier stage uses a standard carbon resistor of around 100,000 ohms or an RF choke of 1 mHy or 2.5 mHy... again lots of room for experimenting. From the plate of the triode I connect a capacitor to the top of the regenerative detector tuned circuit..., and you can try connecting it from the ground end up at a few turns .... experiment for best results... BTW... this radio uses a very simple power supply that provides 36 volts regulated to the 6AK5 regenerative detector plate and to the screen grid potentiometer that controls regeneration... The grounded grid RF stage is fed from the 120 volts DC unregulated supply that also provides plate voltage for the triode of the 6BM8 or ECL82 , and for the plate of the output tetrode of that tube... Audio quality is excellent, and I am now building yet another one to be used at our amateur radio club training program... Good results for ham radio reception of CW and SSB signals has to do with the quality of the air spaced tuning capacitor and the type of dial used for proper slow motion tuning.... The ideal capacitor and dial mechanism , without any doubt, can be found at the bay place looking for a BC221, LM or the Russian CHA4'1 heterodyne frequency meters....

My advice is that you first try to build a prototype to familiarize with the regenerative circuit using the Hartley circuit and screen grid control of regeneration... and then when you are happy with the results, build a ¨ final version ¨ .

73 and DX

Arnie Coro CO2KK

Host of Dxers Unlimited radio hobby program from Radio Havana Cuba...

On 20/04/17 10:55, rhulett1@... [regenrx] wrote:
>
>
> I am looking for a circuit to isolate the antenna from the detector in
> my 2 tube regen from Aug 1951, similar to the National SW-3. Mine
> uses a 12SJ7/12SL7. Does anyone have suggestions for adding RF
> amplification? Maybe someone has already built something like this.
> Any circuit advice for this? I hope to use the existing chassis as a
> basis for 3 tube.
>
> 73, Curt KB5JO
>
>
>
>
>

27955. Re: [regenrx] Adding an RF amplifier?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-20 17:20:04 UTC
From: Michael
Topic: 27950 Message: 27955

Arnie, your expert advice is always highly appreciated,
especially by those of us with limited resources.

Where possible, an added schematic would often be a great help
for implementation and expermentation.

Do you have a website with schematics and descriptions?

¡Saludos!

MichaelUK
.....

On 20.04.17 16:56, 'Prof. Arnaldo Coro Antich' coro@... [regenrx] wrote:
>
>
> Dear amigo....
>
> A very easy to put in practice circuit to isolate the antenna from the
> regenerative detector stage is a simple grounded grid triode amplifier
> stage...
>
> Any triode or triode connected tube will do the job !
> My prototype regenerative that has proven to be very effective uses a
> 6AK5 pentode with the screen grid connected to the plate and the control
> grid connected directly to ground.
>
> The cathode acts as the signal input electrode...I use a little trick to
> connect a 1000 ohms carbon potentiometer so that it will act as a
> cathode resistor for the grounded grid stage, and at the same time it is
> used as a primitive yet effective RF signal attenuator... Connect the
> good quality carbon track potentiometer (you can also use a wirewound
> potentiometer of good quality , because the inductance of the high
> resistance per unit length wire is negligible at short wave frequencies)
> Connect the bottom of the potentiometer to ground, the top goes to the
> cathode of the triode tube and the center connection goes to a small
> capacitor to the antenna... The capacitance of that capacitor leaves a
> lot of room for experimenting !!! The plate circuit of my grounded grid
> amplifier stage uses a standard carbon resistor of around 100,000 ohms
> or an RF choke of 1 mHy or 2.5 mHy... again lots of room for
> experimenting. From the plate of the triode I connect a capacitor to the
> top of the regenerative detector tuned circuit..., and you can try
> connecting it from the ground end up at a few turns .... experiment for
> best results... BTW... this radio uses a very simple power supply that
> provides 36 volts regulated to the 6AK5 regenerative detector plate and
> to the screen grid potentiometer that controls regeneration... The

> grounded grid RF stage is fed from the 120 volts DC unregulated supply
> that also provides plate voltage for the triode of the 6BM8 or ECL82 ,
> and for the plate of the output tetrode of that tube... Audio quality is
> excellent, and I am now building yet another one to be used at our
> amateur radio club training program... Good results for ham radio
> reception of CW and SSB signals has to do with the quality of the air
> spaced tuning capacitor and the type of dial used for proper slow motion
> tuning.... The ideal capacitor and dial mechanism , without any doubt,
> can be found at the bay place looking for a BC221, LM or the Russian
> CHA4'1 heterodyne frequency meters....
>
> My advice is that you first try to build a prototype to familiarize with
> the regenerative circuit using the Hartley circuit and screen grid
> control of regeneration... and then when you are happy with the results,
> build a ¨ final version ¨ .
>
> 73 and DX
>
> Arnie Coro CO2KK

27956. Re: [regenrx] Adding an RF amplifier?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-20 18:13:00 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27950 Message: 27956

Dear amigo Michael and all participants of our e'mail distribution list...

Thanks for the nice comments... It is not expert advice.. let's call it
the recommendations that come from may years of ¨cacharreo¨, the word in
Cuban Spanish that is equivalent, more or less with ¨tinkering" in English.

Sorry to say that I am a very poor user of graphics software programs...
so following requests of many of my Dxers Unlimited radio show program,
the ¨solution¨ that we found was to write a very comprehensive ,
detailed, step by step explanation of a circuit, something we
¨discovered here in Cuba to pass along radio circuits to radio amateurs
that live out in the countryside...

This is an example of how we did it---

¨You draw a seven pins miniature socket, and number the pins from one to
seven... This is for a 6AK5 tube type.... Connect pin 3 to ground, and
pin 4 to the 6.3 volts AC voltage. Solder a .01 disc ceramic capacitor
from pin 4 to pin3....

On 20/04/17 13:20, Michael michael.setaazul@... [regenrx] wrote:
> Arnie, your expert advice is always highly appreciated,
> especially by those of us with limited resources.
>
> Where possible, an added schematic would often be a great help
> for implementation and expermentation.
>
> Do you have a website with schematics and descriptions?
>
> ¡Saludos!
>
> MichaelUK
> ....
>
>
> On 20.04.17 16:56, 'Prof. Arnaldo Coro Antich' coro@... [regenrx] wrote:
>>
>> Dear amigo....
>>
>> A very easy to put in practice circuit to isolate the antenna from the
>> regenerative detector stage is a simple grounded grid triode amplifier
>> stage...
>>
>> Any triode or triode connected tube will do the job !
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>> 6AK5 pentode with the screen grid connected to the plate and the control

>> grid connected directly to ground.
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>> The cathode acts as the signal input electrode...I use a little trick to
>> connect a 1000 ohms carbon potentiometer so that it will act as a
>> cathode resistor for the grounded grid stage, and at the same time it is
>> used as a primitive yet effective RF signal attenuator... Connect the
>> good quality carbon track potentiometer (you can also use a wirewound
>> potentiometer of good quality , because the inductance of the high
>> resistance per unit length wire is negligible at short wave frequencies)
>> Connect the bottom of the potentiometer to ground, the top goes to the
>> cathode of the triode tube and the center connection goes to a small
>> capacitor to the antenna... The capacitance of that capacitor leaves a
>> lot of room for experimenting !!! The plate circuit of my grounded grid
>> amplifier stage uses a standard carbon resistor of around 100,000 ohms
>> or an RF choke of 1 mHy or 2.5 mHy... again lots of room for
>> experimenting. From the plate of the triode I connect a capacitor to the
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>> best results... BTW... this radio uses a very simple power supply that
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>> grounded grid RF stage is fed from the 120 volts DC unregulated supply
>> that also provides plate voltage for the triode of the 6BM8 or ECL82 ,
>> and for the plate of the output tetrode of that tube... Audio quality is
>> excellent, and I am now building yet another one to be used at our
>> amateur radio club training program... Good results for ham radio
>> reception of CW and SSB signals has to do with the quality of the air
>> spaced tuning capacitor and the type of dial used for proper slow motion
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>> can be found at the bay place looking for a BC221, LM or the Russian
>> CHA4'1 heterodyne frequency meters....
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>> My advice is that you first try to build a prototype to familiarize with
>> the regenerative circuit using the Hartley circuit and screen grid
>> control of regeneration... and then when you are happy with the results,
>> build a ¨ final version ¨ .
>>
>> 73 and DX
>>
>> Arnie Coro CO2KK
>
> ------------------------------------
> Posted by: Michael <michael.setaazul@...>
> ------------------------------------
>
> "In the interest of Regenerating radio's lost art of Regeneration"
> ------------------------------------
>
> Yahoo Groups Links
>

>
>
>

27957. Re: [regenrx] Adding an RF amplifier? graphics software programs... the mighty pen

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-20 19:16:34 UTC
From: Rob
Topic: 27950 Message: 27957

I had a terrible time with graphics software.
The tools and fonts are way too small for my eyes.

So I take a low tech approach.....
I print out the schematic and draw black dots where components would
attach to
a circuit board:

http://www.learnmorsecode.com/regen/00REGENkitchenbig.jpg

then I connect the dots with a heavy marker.....

THEN I take a picture of it and there isn't much more high tech stuff to do
with it that standard cell phone camera or paint programs can't do easily.

http://www.learnmorsecode.com/regen/01REGENkitchenbig002.jpg

http://www.learnmorsecode.com/716/etch/index.html

http://www.learnmorsecode.com/regen/00regen.html

On 04/20/2017 02:13 PM, 'Prof. Arnaldo Coro Antich' coro@...
[regenrx] wrote:
>
> Dear amigo Michael and all participants of our e'mail distribution list...
>
> Thanks for the nice comments... It is not expert advice.. let's call it
> the recommendations that come from may years of ¨cacharreo¨, the word in
> Cuban Spanish that is equivalent, more or less with ¨tinkering" in
> English.
>
> Sorry to say that I am a very poor user of graphics software programs...
> so following requests of many of my Dxers Unlimited radio show program,
> the ¨solution¨ that we found was to write a very comprehensive ,
> detailed, step by step explanation of a circuit, something we
> ¨discovered here in Cuba to pass along radio circuits to radio amateurs
> that live out in the countryside...
>
> This is an example of how we did it---
>
> ¨You draw a seven pins miniature socket, and number the pins from one to
> seven... This is for a 6AK5 tube type.... Connect pin 3 to ground, and
> pin 4 to the 6.3 volts AC voltage. Solder a .01 disc ceramic capacitor
> from pin 4 to pin3....
>

> On 20/04/17 13:20, Michael michael.setaazul@... [regenrx]
> wrote:
> > Arnie, your expert advice is always highly appreciated,
> > especially by those of us with limited resources.
> >
> > Where possible, an added schematic would often be a great help
> > for implementation and expermentation.
> >
> > Do you have a website with schematics and descriptions?
> >
> > ¡Saludos!
> >
> > MichaelUK
> > ....
> >
> >
> > On 20.04.17 16:56, 'Prof. Arnaldo Coro Antich' coro@...
> [regenrx] wrote:
> >>
> >> Dear amigo....
> >>
> >> A very easy to put in practice circuit to isolate the antenna from the
> >> regenerative detector stage is a simple grounded grid triode amplifier
> >> stage...
> >>
> >> Any triode or triode connected tube will do the job !
> >> My prototype regenerative that has proven to be very effective uses a
> >> 6AK5 pentode with the screen grid connected to the plate and the
> control
> >> grid connected directly to ground.
> >>
> >> The cathode acts as the signal input electrode...I use a little
> trick to
> >> connect a 1000 ohms carbon potentiometer so that it will act as a
> >> cathode resistor for the grounded grid stage, and at the same time
> it is
> >> used as a primitive yet effective RF signal attenuator... Connect the
> >> good quality carbon track potentiometer (you can also use a wirewound
> >> potentiometer of good quality , because the inductance of the high
> >> resistance per unit length wire is negligible at short wave
> frequencies)
> >> Connect the bottom of the potentiometer to ground, the top goes to the
> >> cathode of the triode tube and the center connection goes to a small
> >> capacitor to the antenna... The capacitance of that capacitor leaves a
> >> lot of room for experimenting !!! The plate circuit of my grounded grid
> >> amplifier stage uses a standard carbon resistor of around 100,000 ohms
> >> or an RF choke of 1 mHy or 2.5 mHy... again lots of room for
> >> experimenting. From the plate of the triode I connect a capacitor
> to the
> >> top of the regenerative detector tuned circuit..., and you can try

> >> connecting it from the ground end up at a few turns .... experiment for
> >> best results... BTW... this radio uses a very simple power supply that
> >> provides 36 volts regulated to the 6AK5 regenerative detector plate and
> >> to the screen grid potentiometer that controls regeneration... The
> >> grounded grid RF stage is fed from the 120 volts DC unregulated supply
> >> that also provides plate voltage for the triode of the 6BM8 or ECL82 ,
> >> and for the plate of the output tetrode of that tube... Audio
> quality is
> >> excellent, and I am now building yet another one to be used at our
> >> amateur radio club training program... Good results for ham radio
> >> reception of CW and SSB signals has to do with the quality of the air
> >> spaced tuning capacitor and the type of dial used for proper slow
> motion
> >> tuning.... The ideal capacitor and dial mechanism , without any doubt,
> >> can be found at the bay place looking for a BC221, LM or the Russian
> >> CHA4'1 heterodyne frequency meters....
> >>
> >> My advice is that you first try to build a prototype to familiarize
> with
> >> the regenerative circuit using the Hartley circuit and screen grid
> >> control of regeneration... and then when you are happy with the
> results,
> >> build a ¨ final version ¨ .
> >>
> >> 73 and DX
> >>
> >> Arnie Coro CO2KK
> >
> > ------------------------------------
> > Posted by: Michael <michael.setaazul@...>
> > ------------------------------------
> >
> > "In the interest of Regenerating radio's lost art of Regeneration"
> > ------------------------------------
> >
> > Yahoo Groups Links
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27958. Re: [regenrx] Adding an RF amplifier? graphics software programs... the mighty pen

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-21 00:15:06 UTC
From: rhulett1@...
Topic: 27950 Message: 27958

Eons ago I used something called a resist pen to draw lands on circuit board copper. Then etched with Ferric Chloride. With a resist pen (if they still exist), wouldn't need to go through the transfer process. Just draw it on the copper and etch it.

I found them at first site checked for between $6 to $9. Guess will buy one and try out that process with the peroxide/muriatic acid etch.

73, Curt KB5JO

27959. Re: [regenrx] Adding an RF amplifier? graphics software programs... the mighty pen

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-21 02:06:49 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27950 Message: 27959

My primitive, yet very effective way of making printed circuit boards uses carefully cut lengths of PVC electrician's tape... I can also make ¨ islands¨ that like the lines are cut with a razor sharp blade.

My ¨chemical¨ for processing the boards is made using hydrocloric acid to which a load of rusty nails is added... after some time the resultant liquid will etch the copper left on places where the PVC electricians tape is not present...

Unetched virgin boards are not easy to find locally, so we many times look for old boards... clean them and remove all the copper and then make the circuits wiring by linking parts in holes drilled with a dentist's tool...

and all I can say is that it works !

73 and DX

Arnie Coro CO2KK

On 20/04/17 20:15, rhulett1@... [regenrx] wrote:
>
>
> Eons ago I used something called a resist pen to draw lands on circuit
> board copper. Then etched with Ferric Chloride. With a resist pen (
> if they still exist), wouldn't need to go through the transfer
> process. Just draw it on the copper and etch it.
>
> I found them at first site checked for between $6 to $9. Guess will
> buy one and try out that process with the peroxide/muriatic acid etch.
>
> 73, Curt KB5JO
>
>

27960. Re: [regenrx] KITCHIN version TWO heard Arnie in CUBA AGAIN!

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-21 12:43:37 UTC
From: Baruch Atta
Topic: 27930 Message: 27960
Attachments: 1 described; binary payloads are missing from this source WARC

Rob
Thanks for the offer for the PCB. I will use it to build another one.
Cause I just finished building my first one. I used perf board to hold the
parts. I substituted 50K pots for the 150K and 2K pots. So the tuning and
regen is rough. But as soon as I powered up, I heard a few US Shortwave
stations, including WTWW loud and clear. That's even without any antenna!
Lots of fun. Next I will order the correct pots and play with the coil and
tuning cap to put it in the 40 meter cw band.
BTW, The first thing that I heard on the rig was from station WTWW asking
for reception reports via email, and they will send you a QSL card. I sent
them mine!
73, Joe Cotton W3TTT

On Wed, Apr 19, 2017 at 3:14 PM, Rob roomberg@... [regenrx] <
regenrx@yahoogroups.com> wrote:

>
>
> Its not a kit.
> Its an experiment.
> I'm looking for something to share with scouts... or anybody... any age....
> that is dirt cheap to build using the cheapest parts.
> I'm not selling kits.
> But I will mail a PCB to you.
>
> all I want in return is pictures of anything you build to share with
> newbies.
>
> Do you have the ability to drill the component holes?
>
> Give me your mailing address.
>
> On 04/19/2017 12:48 PM, Baruch Atta baruchatta@... [regenrx] wrote:
>
>
> Is the Kitchin Regen being offered as a Kit or a PC board?
>
> Joe W3TTT
>
> On Sun, Apr 9, 2017 at 11:36 PM, Rob roomberg@... [regenrx] <
> regenrx@yahoogroups.com> wrote:
>
>>
>>

>> I had reworked the artwork to spread out crowded components.....
>> the goal being make it easier for kids who never soldered before.
>>
>> And
>> as soon as I plugged in the 9 volt battery I heard CW.
>> I WAS surprised that I heard CW.
>> I had not found ANY CW using the first KITCHIN regen.
>> BUT
>> it was NOT CW QSOs ... it was the beginning of
>>
>> Dxers Unlimited radio hobby show ....Radio Havana Cuba
>>
>> so I recorded some of it.... Arnie talking about the PARASET rig:
>> http://www.learnmorsecode.com/regen/02REGENarnie.mp3
>>
>> BIG smiles here.
>>
>> http://www.learnmorsecode.com/regen/00regen.html
>>
>>
>
>
>

27961. Re: [regenrx] Adding an RF amplifier? graphics software programs... the mighty pen

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-21 18:56:15 UTC
From: msalbert@...
Topic: 27950 Message: 27961

The "resist pens" are simply Black sharpie permanent ink markers. You can get them any place where they have office supplies. Much cheaper :-) A hint for others who may want to try this… When drawing on your PC blank, make sure the copper is scrubbed clean, and that the ink goes on nice and black. you don't want to see any copper showing through where you draw. Regards, Mark -----Original Message----- From: rhulett1@... [regenrx] To: regenrx Sent: Thu, Apr 20, 2017 07:15 PM Subject: Re: [regenrx] Adding an RF amplifier? graphics software programs... the mighty pen

Eons ago I used something called a resist pen to draw lands on circuit board copper. Then etched with Ferric Chloride. With a resist pen (if they still exist), wouldn't need to go through the transfer process. Just draw it on the copper and etch it. I found them at first site checked for between $6 to $9. Guess will buy one and try out that process with the peroxide/muriatic acid etch. 73, Curt KB5JO

27962. Re: [regenrx] Adding an RF amplifier? graphics software programs... the mighty pen

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-21 19:10:47 UTC
From: J Ed
Topic: 27950 Message: 27962

When etching circuit boards, I never had any luck with sharpie pens. Trying to make two layers of ink failed, as the second layer would erase the first.

I found that a good circuit board resist was latex paint. You can get an 8-oz sample from most hardware stores. Some of them have a color-error shelf, where the color didn't turn out exactly right and the buyer rejected it. These samples are cheaper still or sometimes free.

Use a toothpick or other fine pointed object to draw out your traces. Practice is helpful to ensure you make neat, organized traces. This isn't a necessity - look at PCB layouts from the 80s-90s, where the "traces" are blobs that cover most of the PCB. The hard part is getting in areas with close-together pins, such as DIPs and so forth. I'm sure that, with practice, someone could perfect it.

After painting, use a hot air dryer and blow on it for a while. Even though the paint may be dry to the touch, keep heating it. This hardens the paint onto the copper.

Etch.

Then you get to scrub the paint off the remaining traces. That's a lot of fun.

Ed AE7TE

On Fri, Apr 21, 2017 at 8:56 PM, msalbert@... [regenrx] <
regenrx@yahoogroups.com> wrote:

>
>
> The "resist pens" are simply Black sharpie permanent ink markers. You can
> get them any place where they have office supplies. Much cheaper :-)
> A hint for others who may want to try this… When drawing on your PC blank,
> make sure the copper is scrubbed clean, and that the ink goes on nice and
> black. you don't want to see any copper showing through where you draw.
> Regards, Mark
>
> -----Original Message-----
> From: rhulett1@consolidated.net [regenrx] <regenrx@yahoogroups.com>
> To: regenrx <regenrx@yahoogroups.com>
> Sent: Thu, Apr 20, 2017 07:15 PM
> Subject: Re: [regenrx] Adding an RF amplifier? graphics software
> programs... the mighty pen
>

>
>
>
> Eons ago I used something called a resist pen to draw lands on circuit
> board copper. Then etched with Ferric Chloride. With a resist pen (if
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> one and try out that process with the peroxide/muriatic acid etch.
>
> 73, Curt KB5JO
>
>
>

27963. Re: [regenrx] Adding an RF amplifier? graphics software programs... the mighty pen

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-21 19:55:18 UTC
From: Robert Nickels
Topic: 27950 Message: 27963

With laser printers as cheap as $30 and toner transfer there's no reason to screw around nowadays. The biggest problem is the trial-and-error required to develop a transfer process that works with your particular toner composition. Not wishing to spend 4-5X as much for authentic HP toner replacement cartridges, I've found good success with the yellow waxy-coated paper from Chinese suppliers and a $20 laminator using cheap replacement toner which has different properties.

Some use liquid photoresist or dry film but toner transfer is fast and simple and doesn't require exotic materials or playing chemist. Once I prove a concept I'll get professionally-made boards from China anyway, so I'm really only interested in prototypes and one-offs. If all goes well I can print and have a board ready for etching in under 10 minutes. If not...well, it gets frustrating sometimes!

The concept that does intrigue me most is direct laser printing, where toner (resist) is applied directly the PCB and then etched. This requires modications to the printer and an acetone vapor fusing process, so I have not tried it myself - anyone?

73, Bob W9RAN

27964. Re: [regenrx] Adding an RF amplifier? graphics software programs... the mighty pen

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-21 22:07:21 UTC
From: Rob
Topic: 27950 Message: 27964

See Homebrew_PCBs@yahoogroups.com
for years of home brew advice.

The PANTUM p2502w driect print to copper is WELL documented HOW here:
https://www.instructables.com/id/Modification-of-the-Pantum-2502W-for-Direct-Laser-/

I have not gotten a round tuit yet but I did buy the printer.

As far as etch and hand drawing goes......
I laser print on cheap yellow transfer paper
then heat press toner transfer
http://www.learnmorsecode.com/laminator/hotcakes.html
http://www.learnmorsecode.com/regen/03batch1.jpg

With very consistent results.
I scrub my copper with very fine grit sand paper and then wash with acetone.
Then 3 minutes press time and sometimes have some missing toner transfer
spots that I clean up with
EDDING 404 instead of a sharpie.

I experimented with all sorts of inks...even found different colors
reacted differently within
product lines.

I experimented with an array of inks and nail polishes and concluded

KRYLON SHORT CUTSHOBBY and CRAFT ENAMEL SCB-026 gloss black

worked best if you truly could not purchase EDDING 404 pens.

The label says clean up brushes with lacquer thinner so I suspect that
this paint can be thinned with lacquer thinner and then used in a
drafting technical pen.
I have not ruined any drafting pens yet. More round tuit stuff.

On 04/21/2017 03:55 PM, Robert Nickels w9ran@... [regenrx] wrote:
>
> With laser printers as cheap as $30 and toner transfer there's no reason
> to screw around nowadays. The biggest problem is the trial-and-error
> required to develop a transfer process that works with your particular
> toner composition. Not wishing to spend 4-5X as much for authentic HP
> toner replacement cartridges, I've found good success with the yellow
> waxy-coated paper from Chinese suppliers and a $20 laminator using cheap
> replacement toner which has different properties.
>
> Some use liquid photoresist or dry film but toner transfer is fast and

> simple and doesn't require exotic materials or playing chemist. Once I
> prove a concept I'll get professionally-made boards from China anyway,
> so I'm really only interested in prototypes and one-offs. If all goes
> well I can print and have a board ready for etching in under 10
> minutes. If not...well, it gets frustrating sometimes!
>
> The concept that does intrigue me most is direct laser printing, where
> toner (resist) is applied directly the PCB and then etched. This
> requires modications to the printer and an acetone vapor fusing process,
> so I have not tried it myself - anyone?
>
> 73, Bob W9RAN
>
>

27966. Re: [regenrx] Adding an RF amplifier? graphics software programs... the mighty pen

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-21 22:16:12 UTC
From: Robert Nickels
Topic: 27950 Message: 27966

On 4/21/2017 5:07 PM, Rob roomberg@... [regenrx] wrote:
>
> I have not gotten a round tuit yet but I did buy the printer.

Same here. I'd be interested in knowing how your conversion goes, as I'm not likely to get to it for some time. There'd probably be a market for already-converted printers if someone were to get the process down pat, as this is truly a "hack" (as in chopping out pieces!)

73, Bob W9RAN

27969. Re: Kees Talen's "space charge" regen

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-22 21:43:06 UTC
From: b_weeber@...
Topic: 27965 Message: 27969

** I would think the choke should be left off as it raises the grid rf wise

Paul and Mike, i think, you are right. The rf signals on cathode and grid are in phase. This reduces the amplification as well as the isolation between antenna and the following regenerative detector. The rf inductor can pick up anything in the near and feed it into the preamp. It is much more sensitive in picking up, because oft it's high number of turns.

In my case, when i connected the grid directly to ground, i recognized vhf oscillation. A 220 ohms stopper resistor from grid to ground solved this. But instead of a triode i used a pentode in a common grid configuration, which isolates at least ten times better between anode and cathode compared to a triode. The pentode should have a seperate suppressor grid, so there are 2 grids connected to ground and the screen grid blocked by a capacitor. Care has to be taken, so the attenuated antenna signal is not able to cross over into the rest of the circuit. In my case on 20m band the rf potentiomer turned from 0 to 100% and back caused frequency shifts below 100 Hz.

Some data sheets are mentioning the Cac (anode to cathode capacity)
- Triode 6AB4: 0.24 pF
- Pentode 6BX6: 0.012 pF

Best regards,
Bernd

27970. Re: Kees Talen's "space charge" regen

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-23 17:25:18 UTC
From: winston376@...
Topic: 27965 Message: 27970

Why don't you read the notes made by the designer instead of guessing? He discusses the choke and the grid circuit of the RF amp. Read and understand.
BW

27971. RE: [regenrx] Re: Kees Talen's "space charge" regen

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-23 21:11:46 UTC
From: Hubert Miller
Topic: 27965 Message: 27971

Probably because it’s not a grounded grid amplifier with the grid not grounded. A one-off success does not make an incorrect explanation good or guarantee repeatability.
There are leakage paths probably capacitive which conduct the signal to the preamp grid, since it’s above ground, or even beyond to the tuned circuit. It doesn’t take much.
-Hue

>Why don't you read the notes made by the designer instead of guessing?
He discusses the choke and the grid circuit of the RF amp. Read and understand.
BW

27972. Re: [regenrx] Re: Kees Talen's "space charge" regen

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-23 21:50:32 UTC
From: Michael
Topic: 27965 Message: 27972

I am curious about this GG issue.

Empirically, is any difference in performance noticed with or without
the choke?
Theoretically, how are the two differentiated? I wonder about
a "floating" grid grabbing sufficient leakage to behave like a GG.
As its main function is isolation, maybe it doesn't matter much
whether it is a real or "fake" GG? Sounds a bit like the debate
over the sensitive Kitchin "floating-diode" regen detector!

UK Intermediate exam passed today. The syllabus unfortunately
omits GG RF amps :-) The toughest bit : gotta think up
three pertinent yet-unchosen callsign letters...

MichaelUK
.....
On 23.04.17 22:11, Hubert Miller kargo_cult@... [regenrx] wrote:
>
> Probably because it’s not a grounded grid amplifier with the grid not
> grounded. A one-off success does not make an incorrect explanation good
> or guarantee repeatability.
> There are leakage paths probably capacitive which conduct the signal to
> the preamp grid, since it’s above ground, or even beyond to the tuned
> circuit. It doesn’t take much.
>
> -Hue
.....
>> Why don't you read the notes made by the designer instead of guessing?
>>
>> He discusses the choke and the grid circuit of the RF amp. Read and
>> understand.
>>
>> BW

27973. KRC-2: does anyone know about this kit?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-23 22:52:35 UTC
From: Ottavio Caruso
Topic: 27973 Message: 27973

Hi all, after selling my commercial receiver I am thinking of building a regen from a kit. After long browsing and surfing, I've seen this kit: http://www.kitradio.co.uk/page10.htm More, but not much info here: http://swling.com/blog/2016/03/the-krc-2-shortwave-regenerative-receiver-kit/#comments Not having a circuit diagram and more technical info, the only things I know about it are: - Sold by Kit Radio Company in UK. It appears the designer/producer s some Tony Westbrook, if that rings any bells to you. - Complete coverage 0-30 Mhz - One user commented: "So it’s a “supergainer”, which got lots of play in the thirties, the advantages of the superhet, but closer to the simplicity of the regen. People weren’t quite ready for a multiple stage IF strip, which is one reason the regen stayed around after the superhet came along" Again does it ring any bells? Is it a regen or something else? It's a fraction of the price of Mfj/Vectronics, etc, kits and it appears to be much simpler. Any input will be appreciated.

27974. Re: KRC-2: does anyone know about this kit?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-23 22:54:19 UTC
From: Ottavio Caruso
Topic: 27973 Message: 27974

Apologies for the bad formatting. I'm on a tablet and I can't change the font size!

27975. Re: [regenrx] Re: Kees Talen's "space charge" regen

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-23 23:18:59 UTC
From: Rob
Topic: 27965 Message: 27975

Read what?
I missed something here.
Where are notes made by the designer?

On 04/23/2017 01:25 PM, winston376@... [regenrx] wrote:
>
> Why don't you read the notes made by the designer instead of guessing?
>
> He discusses the choke and the grid circuit of the RF amp. Read and
> understand.
> BW
>

27976. Re: Kees Talen's "space charge" regen

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-23 23:53:11 UTC
From: b_weeber@...
Topic: 27965 Message: 27976

The circuit inclusive unwanted parasitics locks aproximately like this:
https://groups.yahoo.com/neo/groups/regenrx/files/Exchange/triode_preamp.jpg
https://groups.yahoo.com/neo/groups/regenrx/files/Exchange/triode_preamp.jpg

Cgc and C1 behave as a voltage divider, so the grid is not completely floating. Eventually the 4.7k resistor included between power supply and plate in combination with the low power supply are keeping the triode tamed.

27977. RE: [regenrx] Re: Kees Talen's "space charge" regen

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-24 00:36:28 UTC
From: Hubert Miller
Topic: 27965 Message: 27977

Reminder: the RF amp description from the author reads,
"I wanted the grid of the RF amp to have ONLY the bias level established by the 1K cathode resistor on it, not any potential RF from
the ground to "control" the signal, so a RF choke was added. You can also tie it directly to ground or through a x00K resistor but I believe the RF choke is better."

The circuit is on
http://www.qsl.net/k5bcq/REGEN2/regen3.html

which is on K5BCQ's website http://www.qsl.net/k5bcq/
which has a lot of really interesting reading and photos.

However the description quoted above is a bit iffy. The RFC raises the grid above ground by a very high impedance. Then you can redraw the circuit as a basic
grid input amplifier. The Cgk means some signal on the cathode will be coupled to the grid. The amplification of the grid input and the cathode input are out
of phase. Which one will predominate i can't predict. That's how i see it.
-Hue

>From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Sunday, April 23, 2017 4:53 PM
To: regenrx@yahoogroups.com
Subject: [regenrx] Re: Kees Talen's "space charge" regen

The circuit inclusive unwanted parasitics locks aproximately like this:
https://groups.yahoo.com/neo/groups/regenrx/files/Exchange/triode_preamp.jpg

Cgc and C1 behave as a voltage divider, so the grid is not completely floating. Eventually the 4.7k resistor included between power supply and plate in combination with the low power supply are keeping the triode tamed.

27978. Re: [regenrx] KRC-2: does anyone know about this kit?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-24 09:55:49 UTC
From: Howard Murray
Topic: 27973 Message: 27978

Don't know it personally but I'm VERY impressed by the principle of a fixed 10.7 regeneration strip.
It must have a converter for the various bands so you have in effect a superhet with a regen. detector.Thanks for the tip off... I'll take a closer look my self.Howard Murray G3NBY. most watched address is saxjazz99@...

From: "Ottavio Caruso ottavio2006-degen@... [regenrx]" <regenrx@yahoogroups.com>
To: regenrx@yahoogroups.com
Sent: Sunday, 23 April 2017, 23:52
Subject: [regenrx] KRC-2: does anyone know about this kit?

Hi all, after selling my commercial receiver I am thinking of building a regen from a kit. After long browsing and surfing, I've seen this kit:
http://www.kitradio.co.uk/page10.htm More, but not much info here:
http://swling.com/blog/2016/03/the-krc-2-shortwave-regenerative-receiver-kit/#comments
Not having a circuit diagram and more technical info, the only things I know about it are:
- Sold by Kit Radio Company in UK. It appears the designer/producer s some Tony Westbrook, if that rings any bells to you. - Complete coverage 0-30 Mhz - One user commented: "So it’s a “supergainer”, which got lots of play in the thirties, the advantages of the superhet, but closer to the simplicity of the regen. People weren’t quite ready for a multiple stage IF strip, which is one reason the regen stayed around after the superhet came along" Again does it ring any bells? Is it a regen or something else? It's a fraction of the price of Mfj/Vectronics, etc, kits and it appears to be much simpler.
Any input will be appreciated.

27979. Re: KRC-2: does anyone know about this kit?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-24 10:56:05 UTC
From: Ottavio Caruso
Topic: 27973 Message: 27979

Thanks Howard,

If you don't mind, can you or anyone else explain what a fixed IF has got to do with a regenerative device?

Do I understand correctly if I say that this radio is a superhet with an added oscillator to increase its sensitivity? Is there any theory reference on this subject?

Thanks

On Monday, 24 April 2017, Howard Murray g3nby@... [regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> Don't know it personally but I'm VERY impressed by the principle of a
> fixed 10.7 regeneration strip.
>
> It must have a converter for the various bands so you have in effect a
> superhet with a regen. detector.
> Thanks for the tip off... I'll take a closer look my self.
> Howard Murray G3NBY. most watched address is saxjazz99@...
> <javascript:_e(%7B%7D,'cvml','saxjazz99@...');>
>
>
>
>
>

27980. Re: KRC-2: does anyone know about this kit?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-24 11:14:54 UTC
From: Ottavio Caruso
Topic: 27973 Message: 27980

On a closer inspection I found this forum thread:

http://theradioboard.com/rb/viewtopic.php?f=4&t=6973

Qrp-gaijin, which I believe is a member here, started the thread and Tony Westbrook injected some input, but not too much as this is a proprietary design.

There is a mention of freemodyne, whatever that means, but Tony did not either confirm or deny.

On Monday, 24 April 2017, Ottavio Caruso <ottavio2006-degen@...> wrote:

> Thanks Howard,
>
> If you don't mind, can you or anyone else explain what a fixed IF has got
> to do with a regenerative device?
>
> Do I understand correctly if I say that this radio is a superhet with an
> added oscillator to increase its sensitivity? Is there any theory reference
> on this subject?
>
> Thanks
>
>
> On Monday, 24 April 2017, Howard Murray g3nby@...
> <javascript:_e(%7B%7D,'cvml','g3nby@...');> [regenrx] <
> regenrx@yahoogroups.com
> <javascript:_e(%7B%7D,'cvml','regenrx@yahoogroups.com');>> wrote:
>
>>
>>
>> Don't know it personally but I'm VERY impressed by the principle of a
>> fixed 10.7 regeneration strip.
>>
>> It must have a converter for the various bands so you have in effect a
>> superhet with a regen. detector.
>> Thanks for the tip off... I'll take a closer look my self.
>> Howard Murray G3NBY. most watched address is saxjazz99@...
>>
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>>
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>

27981. Re: [regenrx] Re: KRC-2: does anyone know about this kit?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-24 11:31:42 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27973 Message: 27981

Dear amigos:

You are talking about a radio receiver circuit that is composed of two elements:

1. The front end , that includes the antenna input attenuator, the input bandpass tunable RF filter, the RF amplifier stage, followed by a mixer circuit that receives also a signal from a variable frequency oscillator. The output of the mixer is fed to the second element of this receiver configuration.

2. A second block of circuits that operates as a regenerative detector tuned to a fixed frequency... producing audio output that is fed to a standard audio amplifier circuit

In actual practice is known as a REGENERODYNE, using a fixed frequency regenerative detector, and a front end that uses a variable frequency injection oscillator

The second variation of the REGENERODYNE, by the way, the one I usually build for beginners that need a radio, uses a fixed frequency oscillator at the front end.... and the regenerative detector stage is then capable of tuning a certain frequency range... In actual practice , a regenerative detector operating from 2 to 3 megaHertz will work nicely using crystals for the front end to make possible tuning the short wave bands. Example, using a 5 megaHertz crystal, your radio will tune from 7 to 8 megaHertz... using a 12 megaHertz crystal, your radio will tune from 14 to 15 mHz etc....

73 and DX

Arnie Coro

CO2KK

Host of Dxers Unlimited radio hobby program on Radio Havana Cuba

On 24/04/17 07:14, Ottavio Caruso ottavio2006-degen@... [regenrx] wrote:
>
>
> On a closer inspection I found this forum thread:
>
> http://theradioboard.com/rb/viewtopic.php?f=4&t=6973
>
> Qrp-gaijin, which I believe is a member here, started the thread and
> Tony Westbrook injected some input, but not too much as this is a

> proprietary design.
>
> There is a mention of freemodyne, whatever that means, but Tony did
> not either confirm or deny.
>
>
>
> On Monday, 24 April 2017, Ottavio Caruso <ottavio2006-degen@...
> <mailto:ottavio2006-degen@...>> wrote:
>
> Thanks Howard,
>
> If you don't mind, can you or anyone else explain what a fixed IF
> has got to do with a regenerative device?
>
> Do I understand correctly if I say that this radio is a superhet
> with an added oscillator to increase its sensitivity? Is there any
> theory reference on this subject?
>
> Thanks
>
>
> On Monday, 24 April 2017, Howard Murray g3nby@...
> <javascript:_e(%7B%7D,'cvml','g3nby@...');> [regenrx]
> <regenrx@yahoogroups.com
> <javascript:_e(%7B%7D,'cvml','regenrx@yahoogroups.com');>> wrote:
>
> Don't know it personally but I'm VERY impressed by the
> principle of a fixed 10.7 regeneration strip.
>
> It must have a converter for the various bands so you have in
> effect a superhet with a regen. detector.
> Thanks for the tip off... I'll take a closer look my self.
> Howard Murray G3NBY. most watched address is saxjazz99@...
>
>
>
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>
>

27982. Re: [regenrx] Re: KRC-2: does anyone know about this kit?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-24 13:10:33 UTC
From: Michael
Topic: 27973 Message: 27982

That's the way to go, Arnie! It is a reproducible and responsive design
which lends itself well to experimentation with RF, regen and AF stages.
These can be on three separate boards for convenience.

MichaelUK
....

On 24.04.17 12:31, 'Prof. Arnaldo Coro Antich' coro@... [regenrx] wrote:
>
>
> Dear amigos:
>
> You are talking about a radio receiver circuit that is composed of two
> elements:
>
> 1. The front end , that includes the antenna input attenuator, the input
> bandpass tunable RF filter, the RF amplifier stage, followed by a mixer
> circuit that receives also a signal from a variable frequency
> oscillator. The output of the mixer is fed to the second element of this
> receiver configuration.
>
> 2. A second block of circuits that operates as a regenerative detector
> tuned to a fixed frequency... producing audio output that is fed to a
> standard audio amplifier circuit
>
> In actual practice is known as a REGENERODYNE, using a fixed frequency
> regenerative detector, and a front end that uses a variable frequency
> injection oscillator
>
> The second variation of the REGENERODYNE, by the way, the one I usually
> build for beginners that need a radio, uses a fixed frequency oscillator
> at the front end.... and the regenerative detector stage is then capable
> of tuning a certain frequency range... In actual practice , a
> regenerative detector operating from 2 to 3 megaHertz will work nicely
> using crystals for the front end to make possible tuning the short wave
> bands. Example, using a 5 megaHertz crystal, your radio will tune from 7
> to 8 megaHertz... using a 12 megaHertz crystal, your radio will tune
> from 14 to 15 mHz etc....
>
> 73 and DX
>
> Arnie Coro
>
> CO2KK

27983. RE: [regenrx] Re: KRC-2: does anyone know about this kit?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-24 18:45:15 UTC
From: Hubert Miller
Topic: 27973 Message: 27983

Fremodyne is a VHF converter – superregen detector, for FM broadcast, in one tube.
The radioboard thread has some pretty silly questions asked about the KCR-2. Like noise floor and IMD compared to a straight regen receiver.
-Hue

>On a closer inspection I found this forum thread:

http://theradioboard.com/rb/viewtopic.php?f=4&t=6973

Qrp-gaijin, which I believe is a member here, started the thread and Tony Westbrook injected some input, but not too much as this is a proprietary design.

There is a mention of freemodyne, whatever that means, but Tony did not either confirm or deny.

27984. Re: Kees Talen's "space charge" regen

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-24 19:07:41 UTC
From: winston376@...
Topic: 27965 Message: 27984

After the schematic there are bullet points that you can read about this. As an EE the designer's rationale makes sense to me. BW

27985. RE: [regenrx] Re: Kees Talen's "space charge" regen

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-24 19:45:16 UTC
From: Hubert Miller
Topic: 27965 Message: 27985

The rationale for the non-grounded grid RF stage is that it works. Works, in that the signal does get thru it.
-Hue

>After the schematic there are bullet points that you can read about this. As an EE the designer's rationale makes sense to me. BW

27986. Fwd: Two tubes (actually three) regenerative that provides very good reception from 500 kHz up to 25 mHz (tested) 150 volts DC and 6.3 volts AC

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-24 20:09:34 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27986 Message: 27986
Attachments: 1 described; binary payloads are missing from this source WARC

[Body unavailable in the source archive]

27987. Two tubes (actually three) regenerative that provides very good reception from 500 kHz up to 25 mHz (tested) 150 volts DC and 6.3 volts AC

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-24 20:06:28 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27987 Message: 27987
Attachments: 1 described; binary payloads are missing from this source WARC

[Body unavailable in the source archive]

27988. Re: [regenrx] Two tubes (actually three) regenerative that provides very good reception from 500 kHz up to 25 mHz (tested) 150 volts DC and 6.3 volts AC [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-24 21:37:52 UTC
From: Michael
Topic: 27987 Message: 27988

This schematic warms my heart, Arnie!

It is the kind of design I would build, with a lower, safer HT,
when I should have been doing my school homework :-)

MichaelUK
.....

27989. Re: [regenrx] Two tubes (actually three) regenerative that provides very good reception from 500 kHz up to 25 mHz (tested) 150 volts DC and 6.3 volts AC

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-24 22:03:36 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27987 Message: 27989

Well amigo... There is always room for experimenting by lowering the B PLUS voltage that feeds the regenerative detector tube, and also try using other tubes with different characteristics...

The very easy to reproduce circuit uses a single tuned circuit... leaving a lot of room for experimenting as regards to the tuning range...

Room also for a hybrid version, leaving the regenerative detector with the pentode vacuum tube and using a solid state audio amplifier...

With the voltages shown on the circuit diagram, the regeneration control is as smooth as silk... no plops or clicks... just a swift in and out operation as the circuit approaches the point where it starts to oscillate....

Another area for experimenting... add an antenna coupling link, that has a 1 kilo-ohm carbon control connected so that it acts as an RF input gain control... Of the three legs of the potentiomenter one goes to ground, the top goes to the top of the link coil, and the antenna is connected to the center of the control by means of a ceramic or mica capacitor... finding the right value depends on the frequency range of the regenerative detector...

By the way... this circuit is an excellent TAIL END for a Regenerodyne receiver... using the frequency range from 2 to 3 megaHertz, and several quartz crystals for the front end converter your radio will tune in one megaHertz segments... For example... a 5.000 mHz crystal will make possible receiving from 7.0 to 8.0 megaHertz..... a 12.000 mHz crystal will make possible to receive from 14.0 to 15.0 mHz and TUNING BACKWARDS.. you can listen to 10.0 mHz to 9.0 mHZ (the very popular for SWL broadcast listening 31 meters band...

73 and DX

Arnie Coro radio amateur CO2KK

Host of Dxers Unlimited radio hobby program on the air twice weekly on Radio Havana Cuba... nighttime frequencies 6000, 6145... also later 6060 , 6100 and the Tropical Band frequency on the 5040 kHz

On 24/04/17 17:37, Michael michael.setaazul@... [regenrx] wrote:
> This schematic warms my heart, Arnie!
>
> It is the kind of design I would build, with a lower, safer HT,

> when I should have been doing my school homework :-)
>
> MichaelUK
> ....
>
>
> ----------------------------------
> Posted by: Michael <michael.setaazul@...>
> ----------------------------------
>
> "In the interest of Regenerating radio's lost art of Regeneration"
> ----------------------------------
>
> Yahoo Groups Links
>
>
>
>

27990. RE: [regenrx] Two tubes (actually three) regenerative that provides very good reception from 500 kHz up to 25 mHz (tested) 150 volts DC and 6.3 volts AC [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-24 22:20:22 UTC
From: Hubert Miller
Topic: 27987 Message: 27990
Attachments: 1 described; binary payloads are missing from this source WARC

Arnie – what is the purpose of R7, 47k ?
thanks-
Hue Miller
[cid:image001.gif@01D2BD0E.412AEE10]

27991. Re: [regenrx] Fwd: Two tubes (actually three) regenerative that provides very good reception from 500 kHz up to 25 mHz (tested) 150 volts DC and 6.3 volts AC

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-24 23:18:37 UTC
From: Rob
Topic: 27986 Message: 27991
Attachments: 1 described; binary payloads are missing from this source WARC

Great picture. THANKS ARNIE..... please translate the Spanish to English.

On 04/24/2017 04:09 PM, 'Prof. Arnaldo Coro Antich' coro@...
[regenrx] wrote:
>
>
>
>
>
>
>
> ---
>

27992. Re: [regenrx] Fwd: Two tubes (actually three) regenerative that provides very good reception from 500 kHz up to 25 mHz (tested) 150 volts DC and 6.3 volts AC

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-25 02:10:58 UTC
From: msalbert@...
Topic: 27986 Message: 27992
Attachments: 1 described; binary payloads are missing from this source WARC

Hola Arnie, thanks for posting the schematic! Some questions, please… I understand the box is the European schematic symbol for a resistor. But what do the dashes inside the box mean? Some straight, some slanted… Wattage rating?
It looks like the output transformer has a tap, but I think maybe this is not a center tap?
73 Mark KB9VKE -----Original Message----- From: 'Prof. Arnaldo Coro Antich' coro@...
[regenrx] To: regenrx Sent: Mon, Apr 24, 2017 03:09 PM Subject: [regenrx] Fwd: Two tubes (actually three) regenerative that provides very good reception from 500 kHz up to 25 mHz (tested) 150 volts DC and 6.3 volts AC

27993. Re: [regenrx] Two tubes (actually three) regenerative that provides very good reception from 500 kHz up to 25 mHz (tested) 150 volts DC and 6.3 volts AC

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-25 02:28:03 UTC
From: wd4nka@...
Topic: 27987 Message: 27993

Arnie mentioned:

" .. using the frequency range from 2 to 3 megaHertz, and several quartz crystals for the front end converter your radio will tune in one megaHertz segments... For example... a 5.000 mHz crystal will make possible receiving from 7.0 to 8.0 megaHertz..... "

Very true. I recommend using the very common surplus 10 MHz xtals for 7.0 mHz, basically because you stand less chance tuning in that 5 MHz LO at the front end. Our local Orlando milsurp usually has a full drawer filled with 10 MHz xtals in an assortment of sizes. Especially HC/6, which works nicely in the grid of a 6C5 LO. But the 5 MHz xtal works well, too.

-gary // wd4nka

27994. Re: [regenrx] Two tubes (actually three) regenerative that provides very good reception from 500 kHz up to 25 mHz (tested) 150 volts DC and 6.3 volts AC

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-25 02:36:16 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27987 Message: 27994
Attachments: 1 described; binary payloads are missing from this source WARC

R7 WOOPS ! My mistake... it is a 47 ohms anti parasitic oscillations resistor... A 47 k will reduce the input audio level to the grid of the triode section of the triode-pentode.

My now standard audio modules are done in two configurations (depending on the parts available)

Module A: Uses a ECL82 / 6BM8 with excellent results, no need for tapped transformer, but I do add a .1 mfd 600 v polyester bypass capacitor from screen to ground...

Module B: Uses 6AU6 of similar audio preamp, and EL84 audio output...

Then later Module C: came to life including simple audio filters...

On 24/04/17 18:20, Hubert Miller kargo_cult@... [regenrx] wrote:
>
>
> Arnie – what is the purpose of R7, 47k ?
>
> thanks-
>
> Hue Miller
>
>
>
>

27995. Re: [regenrx] Fwd: Two tubes (actually three) regenerative that provides very good reception from 500 kHz up to 25 mHz (tested) 150 volts DC and 6.3 volts AC

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-25 02:52:09 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27986 Message: 27995
Attachments: 1 described; binary payloads are missing from this source WARC

Translation from Spanish to English:

On 24/04/17 19:18, Rob roomberg@... [regenrx] wrote:
>
>
> Great picture. THANKS ARNIE..... please translate the Spanish to
> English.
> Add capacitor in parallel with the main tuning C2 for bandspread tuning.
C1 Antenna coupling capacitor 1 to 5 pF
You can also use a link coil on the same coil form to feed the RF from
the antenna by inductive coupling

The test below the 6AK5 says: Highly sensitive regenerative receiver
with Soviet made vacuum tubes (valves) that are available in Cuba

FURTHER IMPROVEMENTS: Use 6.0 volts regulated DC voltage to feed the
filaments of the 6AK5 tube
Regulate the feed voltage to the screen grid regeneration control... the
150 k potentiometer can be changed to 100 k or 50 k and using a series
voltage dropping resistor...
The coil L2 is open for experimentation ... typical distance from the
main grid tuning coil , about 1/8 of an inch or 3 mm... If no
oscillation is achieved, just reverse the connections of the plate
feedback winding.
Another area for experimenting: The C2 and R1 parallel network...
Sorry, can't remember right now the meaning of the line inside the
rectangles that represent carbon resistor... My regeneratives using this
16 passive electronic components plus one vacuum tube , use coils wound
using 1 inch or 25 mm cuts of white PVC thick wall pipe.

73 and DX
Arnie Coro CO2KK
>
> On 04/24/2017 04:09 PM, 'Prof. Arnaldo Coro Antich' coro@...
> [regenrx] wrote:
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>> ---

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>

27996. Re: [regenrx] Two tubes (actually three) regenerative that provides very good reception from 500 kHz up to 25 mHz (tested) 150 volts DC and 6.3 volts AC

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-25 12:31:24 UTC
From: Baruch Atta
Topic: 27987 Message: 27996
Attachments: 1 described; binary payloads are missing from this source WARC

The B+ voltage is 160 volts. That is possible without a power transformer in the power supply. Because 117 volts RMS is 160 volts peak to peak, and therefore all you would need is some filtering on the power supply. A low power fuse would be nice as a safety precaution. Does anyone have a circuit for a 160 volt, no transformer, low currrent power supply?
Joe W.3.T.T.T.

On Mon, Apr 24, 2017 at 6:20 PM, Hubert Miller kargo_cult@... [regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> Arnie – what is the purpose of R7, 47k ?
>
> thanks-
>
> Hue Miller
>
>
>

27997. RE: [regenrx] Re: Kees Talen's "space charge" regen

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-25 14:45:32 UTC
From: winston376@...
Topic: 27965 Message: 27997

Hue. You totally missed the point I was making. The bottom line is always whether it works per the designer's criteria and not the intellectual, armchair theorizing and guessing by lazy opinion makers who don't actually build and test circuits but 'troll' out nonsensical comments.

In addition, my comment(s) were directed to folks who are too lazy to read the designer's notes...rationale(s), or understand plain english. BW

27998. AN EFFORT TO PROMOTE THE HOME BREWING OF REGENERATIVE RECEIVERS...

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-25 15:31:47 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27998 Message: 27998

-------- Forwarded Message --------
Subject: AN EFFORT TO PROMOTE THE HOME BREWING OF REGENERATIVE RECEIVERS...
Date: Tue, 25 Apr 2017 10:36:20 -0400
From: Prof. Arnaldo Coro Antich <coro@...>
To: regenrx@...

A part of my Dxers Unlimited radio hobby program to be on the air today... The idea is to promote listeners to build their own radios and accesories... All I can say is that it does work, having had the pleasure of receiving many e'mail messages and letters describing home built regenerative receivers... both vacuum tubes and solid state versions...

73 and DX

Arnie Coro CO2KK

From Dxers Unlimited's script for the 25th of April show...

Just a few days ago, I was asked by a long time Dxers Unlimited listeners if it would be possible to design and build a minimum parts count vacuum tube regenerative receiver that could provide good performance .... Quite a challenge amigo Carlos, I told him, but it can be done.... so I went to my paper archives and started to look at all the circuits , keeping in mind that the request required maximum simplicity, that is minimum number of parts, but also good performance... Of the many circuit diagrams and notes found, it was clear that a single tetrode or pentode vacuum tube with high enough gain could do the job... The SIMPLE REGENERATIVE, will require the use of high impedance headphones , an operating voltage not higher than 90 volts, and if possible no more than 40 to 50 volts... It was also quite clear that the Hartley circuit was possibly the best choice, and that screen grid regeneration control will be an easy approach to the critical control of the vacuum tube's operating point... Well to make a long story short to fit into today's show, all >I can say is that the SIMPLE REGENERATIVE, started to pick up short wave signals just after soldering the last connection. I was running the experimental setup on a gel cell rechargeable battery for providing the filament voltage to the 6AK5 tube, by tapping the battery at the end of the third cell, and the high voltage came from my home brew multi purpose variable voltage bench power supply... I could run the radio at an amazingly low plate voltage of just 25 volts and still be able to receive several short wave broadcast stations on the 49 meters or 6 megHertz band... The audio output volume while running 50 volts on the plate of the 6AK5 was really

good, and after winding the coil for tuning on the 40 meters band it was possible to pick up several Cuban radio amateurs during the daytime Near Vertical Incidence Skywave propagation mode.
The only two critical parts of this minimum parts count experimental radio are the air spaced variable capacitors.. One is the main tuning control , and the other is used as a bandspread for precise tuning of the narrow CW and Single Side Band signals... You will want a good quality potentiometer for the screen grid voltage control and follos standard practice when assembling a receiver's tuned circuit, that can be resumed by saying, build it like a battleship... with heavy wire connections and proper mechanical mounting for the variable capacitors... Now let me add that having had the opportunity of experimenting with this Hartley or cathode tap regenerative receiver using several miniature seven and nine pins pentodes, I found several of the more modern tubes that came out during the best years of the vacuum tubes TV sets, that would receive signals on the AM medium wave broadcast band with plate voltages as low as 12 volts.... Fortunately there are no rare or unobtanium parts used in this simple vacuum tube regenerative receiver... But at least one of the builders here brought out to my attention the fact that the plate and screen grid current of the regenerative detector tube are going through the coils of the magnetic earphones... so Emilio suggested to use a high quality audio output transformer to feed the tube and then connect a pair of high quality, sensitive headphones to the secondary winding of the transformer...My pair of Russian made 2000 ohms impedance headphones work well when used with the high voltage going through them, but Emilio was right in pointing the fact that using a good quality audio output transformer and low impedance headphones will prevent damage to the high impedance headphones in case a short circuit condition happens at the plate circuit of the detector tube... Now for the parts count.... when you start listening to this radio and take a look at the breadboard where the prototype was built, it is simply amazing that it is capable of such a good performance... I do missed the lack of a volume control, to one more potentiometer was added at the antenna input... so now , when listening to the AM broadcast band stations I can just move the antenna gain control to the point of more comfortable reception...
Listen now to the number of parts used : including the home brew tuning coil.... MAXIMUM 20 parts including the required bypass capacitors... Of course that you can test the radio with just one tuning capacitor, and do not use the RF antenna gain control... but adding the bandspread tuning capacitor and the RF gain will improve the performance. Also finding a good quality multi tap audio output transformer may be diffcult nowadays, but it is a worthwhile effort to search for one...
Now, Emilio is building a second SIMPLE RADIO, that as he says is no longer so simple, because he is adding one audio amplifier stage and an audio volume control too.... Si amigos, sure, listening to your own radio based on the early days circuits is quite an experience, especially after you find out how sensitive and selective this radio can be...If you are interested in learning more about this SIMPLE REGENERATIVE receiver

27999. Fwd: AN EFFORT TO PROMOTE THE HOME BREWING OF REGENERATIVE RECEIVERS...

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-25 15:33:10 UTC
From: Prof. Arnaldo Coro Antich
Topic: 27999 Message: 27999

A part of my Dxers Unlimited radio hobby program to be on the air today... The idea is to promote listeners to build their own radios and accesories... All I can say is that it does work, having had the pleasure of receiving many e'mail messages and letters describing home built regenerative receivers... both vacuum tubes and solid state versions...

73 and DX

Arnie Coro CO2KK

From Dxers Unlimited's script for the 25th of April show...

Just a few days ago, I was asked by a long time Dxers Unlimited listeners if it would be possible to design and build a minimum parts count vacuum tube regenerative receiver that could provide good performance .... Quite a challenge amigo Carlos, I told him, but it can be done.... so I went to my paper archives and started to look at all the circuits , keeping in mind that the request required maximum simplicity, that is minimum number of parts, but also good performance... Of the many circuit diagrams and notes found, it was clear that a single tetrode or pentode vacuum tube with high enough gain could do the job... The SIMPLE REGENERATIVE, will require the use of high impedance headphones , an operating voltage not higher than 90 volts, and if possible no more than 40 to 50 volts... It was also quite clear that the Hartley circuit was possibly the best choice, and that screen grid regeneration control will be an easy approach to the critical control of the vacuum tube's operating point... Well to make a long story short to fit into today's show, all >I can say is that the SIMPLE REGENERATIVE, started to pick up short wave signals just after soldering the last connection. I was running the experimental setup on a gel cell rechargeable battery for providing the filament voltage to the 6AK5 tube, by tapping the battery at the end of the third cell, and the high voltage came from my home brew multi purpose variable voltage bench power supply... I could run the radio at an amazingly low plate voltage of just 25 volts and still be able to receive several short wave broadcast stations on the 49 meters or 6 megHertz band... The audio output volume while running 50 volts on the plate of the 6AK5 was really good, and after winding the coil for tuning on the 40 meters band it was possible to pick up several Cuban radio amateurs during the daytime Near Vertical Incidence Skywave propagation mode.
The only two critical parts of this minimum parts count experimental radio are the air spaced variable capacitors.. One is the main tuning control , and the other is used as a bandspread for precise tuning of the narrow CW and Single Side Band signals... You will want a good

quality potentiometer for the screen grid voltage control and follos standard practice when assembling a receiver's tuned circuit, that can be resumed by saying, build it like a battleship... with heavy wire connections and proper mechanical mounting for the variable capacitors... Now let me add that having had the opportunity of experimenting with this Hartley or cathode tap regenerative receiver using several miniature seven and nine pins pentodes, I found several of the more modern tubes that came out during the best years of the vacuum tubes TV sets, that would receive signals on the AM medium wave broadcast band with plate voltages as low as 12 volts.... Fortunately there are no rare or unobtanium parts used in this simple vacuum tube regenerative receiver... But at least one of the builders here brought out to my attention the fact that the plate and screen grid current of the regenerative detector tube are going through the coils of the magnetic earphones... so Emilio suggested to use a high quality audio output transformer to feed the tube and then connect a pair of high quality, sensitive headphones to the secondary winding of the transformer...My pair of Russian made 2000 ohms impedance headphones work well when used with the high voltage going through them, but Emilio was right in pointing the fact that using a good quality audio output transformer and low impedance headphones will prevent damage to the high impedance headphones in case a short circuit condition happens at the plate circuit of the detector tube... Now for the parts count.... when you start listening to this radio and take a look at the breadboard where the prototype was built, it is simply amazing that it is capable of such a good performance... I do missed the lack of a volume control, to one more potentiometer was added at the antenna input... so now , when listening to the AM broadcast band stations I can just move the antenna gain control to the point of more comfortable reception... Listen now to the number of parts used : including the home brew tuning coil.... MAXIMUM 20 parts including the required bypass capacitors... Of course that you can test the radio with just one tuning capacitor, and do not use the RF antenna gain control... but adding the bandspread tuning capacitor and the RF gain will improve the performance. Also finding a good quality multi tap audio output transformer may be diffcult nowadays, but it is a worthwhile effort to search for one... Now, Emilio is building a second SIMPLE RADIO, that as he says is no longer so simple, because he is adding one audio amplifier stage and an audio volume control too.... Si amigos, sure, listening to your own radio based on the early days circuits is quite an experience, especially after you find out how sensitive and selective this radio can be...If you are interested in learning more about this SIMPLE REGENERATIVE receiver

28000. RE: [regenrx] Re: Kees Talen's "space charge" regen

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-25 21:28:02 UTC
From: Hubert Miller
Topic: 27965 Message: 28000

Here is my question. We can, and in fact did, read the designer's "bullet points".
As an EE, what do you say about this 'bullet point' explanation ?
What would be a "sensical" comment about this "bullet point" explanation?

"I wanted the grid of the RF amp to have ONLY the bias level established by the 1K cathode resistor on it, not any potential RF from the ground to "control" the signal, so a RF choke was added. You can also tie it directly to ground or through a x00K resistor but I believe the RF choke is better. "

I would characterize the above explanation as "armchair theorizing". The 'bias level' is DC bias and this doesn't care whether the grid has a choke, resistor, or jumper wire to ground. The cathode resistor ONLY defines the bias.
Raising the grid above ground cannot eliminate "any potential RF from ground".
You do get what we're questioning, right ?
Bernd got it right when he said the high impedance at the grid would NOT isolate the grid from input RF.
What say you, as an E.E. ? Accept the statement verbatim, and move on?

Many circuits 'work' because they work, somehow, despite how the designer "believes" it works. . If the only criterion is that they somehow work, okay. Yes, the circuit meets the design criteria, which is, that "it works".

You seem to dislike analysis and criticism here of circuits. I'm sorry, but this is not just a venue to praise people's projects. You are not the first to be mistaken about the purpose of the discussions here and to think circuit
analysis is somehow beyond the pale.
-Hue

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Tuesday, April 25, 2017 7:46 AM
To: regenrx@yahoogroups.com
Subject: RE: [regenrx] Re: Kees Talen's "space charge" regen

Hue. You totally missed the point I was making.
The bottom line is always whether it works per the designer's criteria and not the intellectual, armchair theorizing and guessing by lazy opinion makers who don't actually build and test circuits but 'troll' out nonsensical comments.

In addition, my comment(s) were directed to folks who are too lazy to read the designer's notes...rationale(s), or understand plain english. BW

28001. RE: [regenrx] Re: Kees Talen's "space charge" regen

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-25 21:53:28 UTC
From: winston376@...
Topic: 27965 Message: 28001

Hue.

In order to 'splain it to you, I would need a large whiteboard and several hours of your undivided attention and your intellectual ability to stay focused on the engineering subject matter....unfortunately, this communication venue does not allow that.

I feel your frustration....now... consider kicking your dog or in the alternate....

BW

28004. Re: Kees Talen's "space charge" regen

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-26 00:35:03 UTC
From: b_weeber@...
Topic: 27965 Message: 28004

While simulating the circuit, it broke into oscillation. it behaves like a TPTG oscillator. No wonder, to grid and plate are equal coils connected with similar resonance frequencies. Oscillation starts already with 4 Volts on the plate.

With included stopper resistor the amplification is still as high as 4-5 times, also because the plate voltage can be fully increased to 12 volts without self oscillation. Then the coupling capacitor between preamp and detector stage can be reduced to 1pF...

I have sent a message to Kees and asked him niceley about his opinion.
Does anybody know, if he is a regenrx member.

28005. RE: [regenrx] Re: Kees Talen's "space charge" regen

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-26 02:15:01 UTC
From: Hubert Miller
Topic: 27965 Message: 28005

Bernd, excellent point about the TPTG, which i had not noticed. A triode tube with resonant circuits in both grid and plate circuits. That is asking for trouble.
-Hue

>While simulating the circuit, it broke into oscillation. it behaves like a TPTG oscillator. No wonder, to grid and plate are equal coils connected with similar resonance frequencies. Oscillation starts already with 4 Volts on the plate.

With included stopper resistor the amplification is still as high as 4-5 times, also because the plate voltage can be fully increased to 12 volts without self oscillation. Then the coupling capacitor between preamp and detector stage can be reduced to 1pF...

I have sent a message to Kees and asked him niceley about his opinion.
Does anybody know, if he is a regenrx member.
Posted by: mailto:b_weeber

28006. Kicking the dog

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-26 03:06:23 UTC
From: Hubert Miller
Topic: 28006 Message: 28006

I tried kicking the dog, as suggested, but it bit back, so i’m still being hypercritical and picky. I’m sorry.
Have a look at the last photo, the underchassis layout, and tell me this is good RF practice.
Note the length of the wire from the switch S1 to the atten pot.
And why put a switch, to switch tube contact pins, in an RF amp stage ??
That’s just asking for trouble!
Note the proximity and positioning of the choke coils.
No wonder an “RF Set” control is needed!
Also contrary to the description, the circuit does not work as a “diode detector” when the “RF Set” control
is not positioned correctly. It may detect on strong signals, but not as a diode detector. If you disagree, tell me how
it functions as a diode. Biased detector (“plate detector” or “power detector”) maybe.

I didn’t tap his internet line or pry into his life to observe the above.
It is all publicly published; we are invited to read it.
I do not have to agree with it.
-Hue

28007. Re: Fwd: AN EFFORT TO PROMOTE THE HOME BREWING OF REGENERATIVE RECEIVERS

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-26 05:07:32 UTC
From: John Hutnick
Topic: 28007 Message: 28007

Can you please post the schematic of the first simple 6AK5 circuit that you describe. I am always interested in the most basic receivers.
Regards, John Hutnick

28008. KITCHIN regen version 4

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-26 06:10:14 UTC
From: Rob
Topic: 28008 Message: 28008

KITCHIN regen version 4 is same circuit ....with wider traces... just more copper.

Reception is consistent across all 4 versions..... ALL of them heard Cuba.

http://www.learnmorsecode.com/regen/04bottom.jpg

http://www.learnmorsecode.com/regen/00regen.html

28009. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-26 15:42:00 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28009

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Blue Grass Radio/HF Broadband Mxer.asc
Uploaded by : bluegrass_radio <danieljackson@...>
Description : This is an interesting mixer for Mediumwave to HF @ 30 MHz.

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Blue%20Grass%20Radio/HF%20Broadband%20Mxer.asc

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

bluegrass_radio <danieljackson@...>

28010. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-26 15:43:02 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28010

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Blue Grass Radio/regenerative-receiver.asc
Uploaded by : bluegrass_radio <danieljackson@...>
Description : Regenerative Detector using J10 FET.

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Blue%20Grass%20Radio/regenerative-receiver.asc

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

bluegrass_radio <danieljackson@...>

28011. Re: [regenrx] New file uploaded to regenrx whats ASC

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-26 16:01:35 UTC
From: Rob
Topic: 89 Message: 28011

WHAT is an ASC file?

On 04/26/2017 11:43 AM, regenrx@yahoogroups.com wrote:
>
>
> Hello,
>
> This email message is a notification to let you know that
> a file has been uploaded to the Files area of the regenrx
> group.
>
> File : /Blue Grass Radio/regenerative-receiver.asc
> Uploaded by : bluegrass_radio <danieljackson@...>
> Description : Regenerative Detector using J10 FET.
>
> You can access this file at the URL:
> https://groups.yahoo.com/neo/groups/regenrx/files/Blue%20Grass%20Radio/regenerative-rece
iver.asc
>
> To learn more about file sharing for your group, please visit:
> https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398
>
> Regards,
>
> bluegrass_radio <danieljackson@...>
>
>

28012. pF capacitor tester

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-26 17:10:56 UTC
From: Rob
Topic: 28012 Message: 28012

I was playing with 5pF ceramic capacitor replacement with a gimmick capacitor
when I concluded that none of my digital meters would go down into PICO farad land
so I got a M6013 capacitor meter and tested the capacitors used in the KITCHIN regen.
http://www.learnmorsecode.com/regen/00regen.html

I was curious to so if the capacitors that cost half a penny were even close to their
marked value.

They all were:

http://www.learnmorsecode.com/parts/index.html

There have been doubts and mistrust in the Chinese cheap components but so far I
have not been disappointed by these dirt cheap components.

1,000 capacitors for $7
1,000 resisters for $10
1,000 2N2222 transistors for $7

The RADIO SHACK prices.. $2 for 5 resisters..... was a mugging.

All the parts I used that heard France and Cuba cost less than a beer.
http://www.learnmorsecode.com/regen/bom.jpg
http://www.learnmorsecode.com/regen/04top.jpg

28013. Re: [regenrx] pF capacitor tester

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-26 18:24:49 UTC
From: Michael
Topic: 28012 Message: 28013

That is encouraging, Rob.

How do the 2n222 transistors compare?
Did you have to pay any import duties or other similar charges?

Best wishes for your impressively successful project!

MichaelUK
.....

On 26.04.17 18:10, Rob roomberg@... [regenrx] wrote:
>
> There have been doubts and mistrust in the Chinese cheap components but
> so far I have not been disappointed by these dirt cheap components.
>
> 1,000 capacitors for $7
> 1,000 resisters for $10
> 1,000 2N2222 transistors for $7

28014. RE: [regenrx] pF capacitor tester

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-26 20:31:31 UTC
From: Hubert Miller
Topic: 28012 Message: 28014

From what i have read, the imported parts problems only intrude in the area of chips, IC’s. Then there have been some used – recycled, or second-grade relabeled. I read one article which even reported that some Chinese
relabeled chips had gotten into U.S. defense department electronics.
A few years back, i had a number of experiences with terrible quality control in Chinese products; it seemed the only goal was to
make a sale; if the product didn’t work out well, well, that’s just tough. It seems that era is over, thankfully. Maybe that had to be
part of China’s bootstrapping, industrialization process, which they climbed very rapidly.

My brother builds large LED assemblies for plant nurseries and he’s steadily buying LEDs and power transistors and power switch
circuitry from Hong Kong and China and he is constantly astonished at the low prices. Sometimes a price will be around $5 – or less !
and – the postage is INCLUDED – i mean price is inclusive – from China. __
-H

28015. Re: [regenrx] New file uploaded to regenrx whats ASC

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-27 12:10:11 UTC
From: wb9kzy@...
Topic: 89 Message: 28015

Rob -

They are ASCII files, can be opened with Notepad or other text editors but in these cases they are schematics to be opened by the free simulation program called: LTSpice:

< http://www.linear.com/designtools/software/#LTspice
http://www.linear.com/designtools/software/#LTspice >

73,

Chuck, WB9KZY

28016. Re: pF capacitor tester

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-28 18:54:46 UTC
From: b_weeber@...
Topic: 28012 Message: 28016

> 5pF ceramic capacitor replacement with a gimmick capacitor

My rule of thumb: 1cm of gimmick capacitor equals 1pF.
It depends a little bit on the wire diameter and how tight it is turned together.

28017. Morsum Magnificat goes online

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-29 23:24:51 UTC
From: Hubert Miller
Topic: 28017 Message: 28017

If you're interested in anything to do with telegraphy or radiotelegraphy, you might want to bookmark
http://www.n7cfo.com/tgph/Dwnlds/mm/mm.htm
and check it from time to time. There are also indicated 'Index Issues' which periodically indexed a recent
range of dates.

This is a generous offering, scan project for Morsum Magnificat magazines. There were numerous articles
on wartime radiotelegraphy, clandestine radio use, and such.

I gave away most of my copies years ago and then sort of regretted it. Now comes this site to the rescue.
Note, it's a work in progress; copies are still to be scanned in. We can be thankful for generous hobby
colleagues who kindly do this work to share the interest.
-H

28018. Checking small capacitor values. . .

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-30 20:03:52 UTC
From: Phil
Topic: 28018 Message: 28018

I'm not sure if it was on this list, or the Softrock list (both do a lot of construction), but awhile back somebody was discussing checking small capacitor values, and one individual posted a picture of the capacity tester they used.

Well, I too do a lot of constructing, and in fact am presently building another Softrock Ensemble II LF. Lots of toroids to wind as well as a lot of capacitors with values indicated with itsy-bitsy writing that requires the use of my Forehead mounted magnifier combined with the lit bench magnifier to read. When I wind the toroids I like to test each one for value to double check my turns count.

Rather than buy a single purpose meter, I decided to buy a LCR meter (measures inductance, capacitance AND resistance, though I much prefer a DVM for the latter.

This is the one I bought back in August 2015, and it's done yeoman service in my constructing. NOT a bad price either. . .
https://www.amazon.com/gp/product/B00GYT5WL8/ref=oh_aui_detailpage_o02_s00?ie=UTF8&psc=1

By the way, I reviewed the product back in 2015 after I'd used it for some time.

--
73 de Phil, KO6BB.
Specializing in DXing NDBs (Longwave Beacons).

Location: "The Beaconeer's Lair".
Merced, Central California, 37,18,37N 120,30,6W CM97rh
http://www.qsl.net/ko6bb/

HF/LF RADIOS:
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
PORTABLES: Realistic DX380, Grundig G6 Aviator, Grundig S450DLX.
Icom: IC-7200 Xceiver, DSP IF & filters (~2015).
Kenwood: TS-450SAT Xceiver, cascaded 250/125Hz Inrad filters.

ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 4 Port Antenna Multicoupler, Feeds 4 RX's.
AF Filters: Timewave DSP-599zx & HOMEBREW 8 Hz Filter.

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW.
Cushcraft AR-10 Ringo at 14 feet AGL.

28019. RE: [regenrx] Checking small capacitor values. . .

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-30 20:54:55 UTC
From: Hubert Miller
Topic: 28018 Message: 28019

I bought an even lower priced one a couple years back figuring i had little to lose, and i have been extremely happy with it.
The Chinese test instruments with built-in smarts are really kind of amazing (assuming you get a good one) and the free
shipping, priced like a local sale. I have been looking at sweep generators lately and one of those is next, maybe.

If you get yourself one of these LCR meters, and then one of the semiconductor identifier-analyzers for not much more
money, well, then you are really set for success.

The 100H inductor range on this set is well chosen and covers just about every choke you're likely to encounter in power supplies,
and transformers also. I have some 400 Hz power transformers i removed from a microwave signal generator and i was able to
verify that these would make good receiver chokes for old-time circuits, as they were in the range 30 to 50 H.
I have sometimes wanted a higher end tester for some of those old-time receiver chokes that go into the
several hundreds of Henries, but if i need to do that, i suppose i can rig up an audio generator and resistance box and voltmeter
and do it the harder way.

Thanks for posting the link and reminding me of this! I might even do a slight "upgrade" to this set.
-Hue

28020. Re: [regenrx] Checking small capacitor values. . .

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-30 22:42:30 UTC
From: Rob
Topic: 28018 Message: 28020

The KITCHIN regen calls for 2 to 5 pF on the antenna isolation and 5
other 1nF and 10nF capacitors.
http://www.learnmorsecode.com/regen/00regen.html
I heard we could use a gimmick capacitors twisted wire.....so I thought
it would be nice to KNOW what
value the gimmick cap was.
My other meters don't go down to pF land...

.. so I paid $27 (shipping included) for this cap tester
http://www.ebay.com/itm/291652560897

On 04/30/2017 04:03 PM, Phil ko6bb1@... [regenrx] wrote:
>
> I'm not sure if it was on this list, or the Softrock list (both do a lot
> of construction), but awhile back somebody was discussing checking small
> capacitor values, and one individual posted a picture of the capacity
> tester they used.
>
> Well, I too do a lot of constructing, and in fact am presently building
> another Softrock Ensemble II LF. Lots of toroids to wind as well as a
> lot of capacitors with values indicated with itsy-bitsy writing that
> requires the use of my Forehead mounted magnifier combined with the lit
> bench magnifier to read. When I wind the toroids I like to test each
> one for value to double check my turns count.
>
> Rather than buy a single purpose meter, I decided to buy a LCR meter
> (measures inductance, capacitance AND resistance, though I much prefer a
> DVM for the latter.
>
> This is the one I bought back in August 2015, and it's done yeoman
> service in my constructing. NOT a bad price either. . .
> https://www.amazon.com/gp/product/B00GYT5WL8/ref=oh_aui_detailpage_o02_s00?ie=UTF8&psc=1
>
> By the way, I reviewed the product back in 2015 after I'd used it for
> some time.
>
> --
> 73 de Phil, KO6BB.
> Specializing in DXing NDBs (Longwave Beacons).
>
> Location: "The Beaconeer's Lair".
> Merced, Central California, 37,18,37N 120,30,6W CM97rh
> http://www.qsl.net/ko6bb/
>
> HF/LF RADIOS:

> HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
> PORTABLES: Realistic DX380, Grundig G6 Aviator, Grundig S450DLX.
> Icom: IC-7200 Xceiver, DSP IF & filters (~2015).
> Kenwood: TS-450SAT Xceiver, cascaded 250/125Hz Inrad filters.
>
> ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
> HOMEBREW 4 Port Antenna Multicoupler, Feeds 4 RX's.
> AF Filters: Timewave DSP-599zx & HOMEBREW 8 Hz Filter.
>
> ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
> Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
> 37 foot "Low Noise Vertical", 11 feet AGL for LF/MW.
> Cushcraft AR-10 Ringo at 14 feet AGL.
>
>

28021. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-30 23:08:37 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28021

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Blue Grass Radio/Experimental M Derived Regenerative Receiver.asc
Uploaded by : bluegrass_radio <danieljackson@...>
Description : LTSpice file for an experimental regenerative receiver, see text in this folder.

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Blue%20Grass%20Radio/Experimental%20M%20Derived%20Regenerative%20Receiver.asc

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

bluegrass_radio <danieljackson@...>

28022. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-30 23:09:48 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28022

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Blue Grass Radio/M Derived Regenerative Receiver Circuit.txt
Uploaded by : bluegrass_radio <danieljackson@...>
Description : Text for the LTSpice simulation of the experimental M Derived Receiver.
Consult this to understand the circuit details.

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Blue%20Grass%20Radio/M%20Derived%20Regenerative%20Receiver%20Circuit.txt

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

bluegrass_radio <danieljackson@...>

28023. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-30 23:11:26 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28023

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Blue Grass Radio/Circuit-Diagram.gif
Uploaded by : bluegrass_radio <danieljackson@...>
Description : M Derived Regenerative Receiver VFO circuit, note the LTSpice model is more advanced and demodulates the audio of a two tone carrier.

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Blue%20Grass%20Radio/Circuit-Diagram.gif

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

bluegrass_radio <danieljackson@...>

28024. Re: [regenrx] Checking small capacitor values. . .

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-30 23:16:14 UTC
From: Richard
Topic: 28018 Message: 28024

I too bought an LC meter, an LC-100A for about 15 bux, and was very happy until it became erratic. Then I thought, "That was only one," and bought another one which didn't work out of the box. I conclude at rock-bottom price there is no quality control, but you will be happy if you get a good one.

Richard, AA1P

On 04/30/2017 04:54 PM, Hubert Miller kargo_cult@... [regenrx] wrote:
>
> I bought an even lower priced one a couple years back figuring i had
> little to lose, and i have been extremely happy with it.
> The Chinese test instruments with built-in smarts are really kind of
> amazing (assuming you get a good one) and the free
>
> shipping, priced like a local sale. I have been looking at sweep
> generators lately and one of those is next, maybe.
>
> If you get yourself one of these LCR meters, and then one of the
> semiconductor identifier-analyzers for not much more
>
> money, well, then you are really set for success.
>
> The 100H inductor range on this set is well chosen and covers just
> about every choke you’re likely to encounter in power supplies,
>
> and transformers also. I have some 400 Hz power transformers i removed
> from a microwave signal generator and i was able to
>
> verify that these would make good receiver chokes for old-time
> circuits, as they were in the range 30 to 50 H.
>
> I have sometimes wanted a higher end tester for some of those
> old-time receiver chokes that go into the
>
> several hundreds of Henries, but if i need to do that, i suppose i can
> rig up an audio generator and resistance box and voltmeter
>
> and do it the harder way.
>
> Thanks for posting the link and reminding me of this! I might even do
> a slight “upgrade” to this set.
>
> -Hue
>

>

28025. Re: New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-01 20:46:38 UTC
From: hornpipe112@...
Topic: 89 Message: 28025

what is a .asc file and what do you open it with, please?
G8JMB

28026. Buying just a few resistors ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-01 21:56:02 UTC
From: Hubert Miller
Topic: 28026 Message: 28026

Look, silly question, but bear with me.
I just want to order 4 of 3.3 megohm (3m3) resistors, thru hole, just ordinary old carbon.
I don't want a $25 minimum charge i see only after i go to the cart; i don't want to order a resistor kit, and i don't want to
see a list of manufacturers, leading to spec sheets, before i choose.

What is the simplest way to order only 4 of these simple parts? I would be okay with some kind of minimum charge, but not
$25.
(This is to replace a 4.5 volt bias battery BA-1293/U in an Army radio. I want to just use a regular 9 volt battery with a voltage
divider of 2x 3.3M to give 4.5 volts. There is no circuit drain on the bias supply, it goes to a 3Q4 grid; and the voltage divider
drain on the 9 volt battery will be microamps, so it should last years, even longer than a smoke detector battery.)
thanks-
Hue

28027. Re: [regenrx] Buying just a few resistors ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-01 22:00:50 UTC
From: Sam Neal
Topic: 28026 Message: 28027

What Wattage?

I have three Ohmite variety selection boxes. Say the word, and it's on the way to you (if I have it - I haven't looked yet.

The minimum order is $0.00 with free shipping.

Sam Neal N5AF

Celebrating 60 Years In Amateur Radio

------ Original Message ------
Received: Mon, 01 May 2017 04:56:22 PM CDT
From: "Hubert Miller kargo_cult@... [regenrx]" <regenrx@yahoogroups.com>
To: "tetrode@googlegroups.com" <tetrode@...>,
"regenrx@yahoogroups.com" <regenrx@yahoogroups.com>
Subject: [regenrx] Buying just a few resistors ?

Look, silly question, but bear with me.
I just want to order 4 of 3.3 megohm (3m3) resistors, thru hole, just ordinary old carbon.
I don't want a $25 minimum charge i see only after i go to the cart; i don't want to order a resistor kit, and i don't want to
see a list of manufacturers, leading to spec sheets, before i choose.

What is the simplest way to order only 4 of these simple parts? I would be okay with some kind of minimum charge, but not
$25.
(This is to replace a 4.5 volt bias battery BA-1293/U in an Army radio. I want to just use a regular 9 volt battery with a voltage
divider of 2x 3.3M to give 4.5 volts. There is no circuit drain on the bias supply, it goes to a 3Q4 grid; and the voltage divider
drain on the 9 volt battery will be microamps, so it should last years, even longer than a smoke detector battery.)
thanks-
Hue

28028. Re: [regenrx] Re: New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-01 22:14:39 UTC
From: Jim Simmons
Topic: 89 Message: 28028

I open these particular .asc files with LTSpice. Which is a simulation program.

Jim N5MSJ

On 5/1/2017 3:46 PM, hornpipe112@... [regenrx] wrote:
>
> what is a .asc file and what do you open it with, please?
>
> G8JMB
>
>

28029. RE: [regenrx] Buying just a few resistors ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-01 22:14:35 UTC
From: Hubert Miller
Topic: 28026 Message: 28029

I neglected to explain, there is practically no power thru the resistors. The drain to set up the bias, i decided arbitrarily to be 5 uA or less.
I think a couple of 2M or 3M resistors would be fine 1/8 or 1/4 watt. I said qty=4 because i have a second of these transceivers that needs this done,
eventually. The original battery is a unique based plug-in, not available. The one i removed and took apart, to see what's inside, had
3 mercury cells #625 strapped in series. The date code seemed to be 1963.
Just a couple of the resistors would set on my way on this project.
I would still like to know the answer tho, on small quantity parts orders without having to deal with a large minimum charge,
resistor packages, or having to sidestep lists of manufacturers and package specs.
-Hue

28030. Re: [regenrx] Buying just a few resistors ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-01 22:42:09 UTC
From: Sam Neal
Topic: 28026 Message: 28030

Hello,

The resistors are Ohmite " Little Devels " and I have one each 2.7 meg and 3.9 meg, all 5 Watt resistors and only one each. I spoke too soon. In these variety packs, there is no 3.3 megs.

Try finding a Radio Shack store still open - some are clearing out their parts depts. You might get lucky there.

Sorry I spoke too soon.

Also, on older resistors like these, keep in mind that they tend to drift upward in value with age.

73,

Sam Neal N5AF
Celebrating 60 Years In Amateur Radio

------ Original Message ------
Received: Mon, 01 May 2017 04:56:22 PM CDT
From: "Hubert Miller kargo_cult@... [regenrx]" <regenrx@yahoogroups.com>
To: "tetrode@..." <tetrode@googlegroups.com>,
"regenrx@yahoogroups.com" <regenrx@yahoogroups.com>
Subject: [regenrx] Buying just a few resistors ?

Look, silly question, but bear with me.
I just want to order 4 of 3.3 megohm (3m3) resistors, thru hole, just ordinary old carbon.
I don't want a $25 minimum charge i see only after i go to the cart; i don't want to order a resistor kit, and i don't want to
see a list of manufacturers, leading to spec sheets, before i choose.

What is the simplest way to order only 4 of these simple parts? I would be okay with some kind of minimum charge, but not
$25.
(This is to replace a 4.5 volt bias battery BA-1293/U in an Army radio. I want to just use a regular 9 volt battery with a voltage
divider of 2x 3.3M to give 4.5 volts. There is no circuit drain on the bias supply, it goes to a 3Q4 grid; and the voltage divider
drain on the 9 volt battery will be microamps, so it should last years, even longer than a smoke detector battery.)
thanks-
Hue

28031. Re: [regenrx] Buying just a few resistors ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-01 23:25:51 UTC
From: Rob
Topic: 28026 Message: 28031

I like https://www.banggood.com
1000pcs 100 Value 1/2W Carbon Film Resistor Assortment Kit
for $10 and free shipping because
1/2 W carbon resistors have stripes big enough to see on the tan body
compared to
blue metal film resistors or 1/4 or 1/8th watt resistors.

I store them in coin bottles in a tool box:
http://www.learnmorsecode.com/parts/zresisters.jpg

which makes for rapid parts selection when following a schematic for a
build.

On 05/01/2017 05:56 PM, Hubert Miller kargo_cult@... [regenrx] wrote:
>
> Look, silly question, but bear with me.
> I just want to order 4 of 3.3 megohm (3m3) resistors, thru hole,
> just ordinary old carbon.
>
> I don?t want a $25 minimum charge i see only after i go to the cart; i
> don?t want to order a resistor kit, and i don?t want to
>
> see a list of manufacturers, leading to spec sheets, before i choose.
>
> What is the simplest way to order only 4 of these simple parts? I
> would be okay with some kind of minimum charge, but not
>
> $25.
>
> (This is to replace a 4.5 volt bias battery BA-1293/U in an Army
> radio. I want to just use a regular 9 volt battery with a voltage
>
> divider of 2x 3.3M to give 4.5 volts. There is no circuit drain on
> the bias supply, it goes to a 3Q4 grid; and the voltage divider
>
> drain on the 9 volt battery will be microamps, so it should last
> years, even longer than a smoke detector battery.)
>
> thanks-
>
> Hue
>
>

28032. They are not aliens. They are extra prototyping pads

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-02 00:48:28 UTC
From: Rob
Topic: 28032 Message: 28032

I got an inquiry WHATS UP WITH ALL THOSE DAMN ALIENS

They are not aliens. They are extra prototyping pads
http://www.learnmorsecode.com/regen/04bottom.jpg

I found that often the additional output capacitor or
fine tuning capacitor needed some PCB landing anchor so
I always leave additional 3 hole pads for prototyping tasks.

http://www.learnmorsecode.com/laminator/mpf102shine.jpg

28033. RE: [regenrx] Buying just a few resistors ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-02 03:56:30 UTC
From: <rbhat@...>
Topic: 28026 Message: 28033

It should be available from Mouser. They don't have a minimum charge.

Raj

---- "Hubert Miller kargo_cult@... [regenrx]" <regenrx@yahoogroups.com> wrote:
> I neglected to explain, there is practically no power thru the resistors. The drain to set up the bias, i decided arbitrarily to be 5 uA or less.
> I think a couple of 2M or 3M resistors would be fine 1/8 or 1/4 watt. I said qty=4 because i have a second of these transceivers that needs this done,
> eventually. The original battery is a unique based plug-in, not available. The one i removed and took apart, to see what's inside, had
> 3 mercury cells #625 strapped in series. The date code seemed to be 1963.
> Just a couple of the resistors would set on my way on this project.
> I would still like to know the answer tho, on small quantity parts orders without having to deal with a large minimum charge,
> resistor packages, or having to sidestep lists of manufacturers and package specs.
> -Hue

28034. RE: [regenrx] Buying just a few resistors ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-02 04:02:03 UTC
From: <rbhat@...>
Topic: 28026 Message: 28034

Here's the link to the page where you will find three choices for a 3.3 Mohm carbon composition resistor.

http://www.mouser.com/Passive-Components/Resistors/Carbon-Composition-Resistors/_/N-5g9p?P=1z0vkk2Z1yzbpod

Raj

---- rbhat@... wrote:
> It should be available from Mouser. They don't have a minimum charge.
>
> Raj
>
> ---- "Hubert Miller kargo_cult@... [regenrx]" <regenrx@yahoogroups.com> wrote:
> > I neglected to explain, there is practically no power thru the resistors. The drain to set up the bias, i decided arbitrarily to be 5 uA or less.
> > I think a couple of 2M or 3M resistors would be fine 1/8 or 1/4 watt. I said qty=4 because i have a second of these transceivers that needs this done,
> > eventually. The original battery is a unique based plug-in, not available. The one i removed and took apart, to see what's inside, had
> > 3 mercury cells #625 strapped in series. The date code seemed to be 1963.
> > Just a couple of the resistors would set on my way on this project.
> > I would still like to know the answer tho, on small quantity parts orders without having to deal with a large minimum charge,
> > resistor packages, or having to sidestep lists of manufacturers and package specs.
> > -Hue

28035. Screwdriver adjust, locking var caps - repurpose ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-02 05:47:06 UTC
From: Hubert Miller
Topic: 28035 Message: 28035

(I don't recall if i included this question to regenrx as well as another group.)

"Single bearing, locking shaft, screwdriver adjust variable capacitors."
I harvested around 20 out of a boat radio antenna coupler. These are real nice and clean around 200 pF variables.
They are single-hole mounting. The shaft bushing is tapered and split near the end so a second smaller nut on the
bushing, locks the shaft from turning. Only about 1/8 inch of shaft protrudes beyond the shaft bushing; not enough
to attach any kind of knob to.
How to use these? I know that as single-bearing caps, they are not stable enough for VFO use. But i would like to be
able to use them for something.
If i superglue a shaft extension onto the shaft end, do you think that joint will be strong enough to hold?
There is not enough shaft protruding to use a shaft coupling.
If i saw down the bushing length, it ruins the mounting thread.
These caps are stiffer to turn than the usual broadcast radio cap.
I would like to figure out a way to repurpose them for true variable use, not adjust and lock in place.
thanks-
Hue

28036. Re: [regenrx] Screwdriver adjust, locking var caps - repurpose ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-02 12:36:06 UTC
From: Michael
Topic: 28035 Message: 28036

I would drill into the shaft and thread it.
Then screw in an extension with super-glue or similar.
If sturdily built, as I would assume, given their provenance,
they might well be suitable for a VFO. In extremis, I would
extract the moving vane part and lightly sand the shaft down.

Even if it would not seem worth the effort - the challenge
certainly is! With a bit of luck DT will ban varicaps :-)

Ah, I have momentarily realised that I have a few amongst
the cobwebs in the j-box. Maybe one day...

MichaelUK
.....

On 02.05.17 06:47, Hubert Miller kargo_cult@... [regenrx] wrote:
>
>
> (I don?t recall if i included this question to regenrx as well as
> another group.)
>
>
>
> ?Single bearing, locking shaft, screwdriver adjust variable capacitors.?
>
> I harvested around 20 out of a boat radio antenna coupler. These are
> real nice and clean around 200 pF variables.
>
> They are single-hole mounting. The shaft bushing is tapered and split
> near the end so a second smaller nut on the
>
> bushing, locks the shaft from turning. Only about 1/8 inch of shaft
> protrudes beyond the shaft bushing; not enough
>
> to attach any kind of knob to.
>
> How to use these? I know that as single-bearing caps, they are not
> stable enough for VFO use. But i would like to be
>
> able to use them for something.
> If i superglue a shaft extension onto the shaft end, do you think that
> joint will be strong enough to hold?
>
> There is not enough shaft protruding to use a shaft coupling.
> If i saw down the bushing length, it ruins the mounting thread.
>

> These caps are stiffer to turn than the usual broadcast radio cap.
>
> I would like to figure out a way to repurpose them for true variable
> use, not adjust and lock in place.
>
> thanks-
>
> Hue

28037. RE: [regenrx] Buying just a few resistors ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-02 14:21:40 UTC
From: Mike Dice
Topic: 28026 Message: 28037

Tell Mouser when ordering to ship them First Class Mail (not Priority). If the package is 13 ounces or less you're only going to pay around $3.00 shipping. And in my opinion it's faster than UPS which they usually use. I just received an order placed that way and shipping was only $2.61.

28038. RE: [regenrx] Buying just a few resistors ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-02 14:23:41 UTC
From: Mike Dice
Topic: 28026 Message: 28038

Or if you buy from Digikey you can send them a check in the snail mail and they'll ship for free.

28039. Re: [regenrx] Buying just a few resistors ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-02 14:39:48 UTC
From: Baruch Atta
Topic: 28026 Message: 28039

Check eBay. Many sources with free shipping. I'll bet you can find a source for 99 cents.

On May 1, 2017 6:06 PM, "'Sam Neal' n5af@... [regenrx]" <regenrx@yahoogroups.com> wrote:

>
>
> What Wattage?
>
> I have three Ohmite variety selection boxes. Say the word, and it's on the
> way
> to you (if I have it - I haven't looked yet.
>
> The minimum order is $0.00 with free shipping.
>
> Sam Neal N5AF
>
> Celebrating 60 Years In Amateur Radio
> _____
>
> ------ Original Message ------
> Received: Mon, 01 May 2017 04:56:22 PM CDT
> From: "Hubert Miller kargo_cult@... [regenrx]" <
> regenrx@yahoogroups.com>
> To: "tetrode@googlegroups.com" <tetrode@...>,
> "regenrx@yahoogroups.com" <regenrx@yahoogroups.com>
> Subject: [regenrx] Buying just a few resistors ?
>
> Look, silly question, but bear with me.
> I just want to order 4 of 3.3 megohm (3m3) resistors, thru hole, just
> ordinary old carbon.
> I don't want a $25 minimum charge i see only after i go to the cart; i
> don't
> want to order a resistor kit, and i don't want to
> see a list of manufacturers, leading to spec sheets, before i choose.
>
> What is the simplest way to order only 4 of these simple parts? I would be
> okay with some kind of minimum charge, but not
> $25.
> (This is to replace a 4.5 volt bias battery BA-1293/U in an Army radio. I
> want to just use a regular 9 volt battery with a voltage
> divider of 2x 3.3M to give 4.5 volts. There is no circuit drain on the bias
> supply, it goes to a 3Q4 grid; and the voltage divider
> drain on the 9 volt battery will be microamps, so it should last years,

> even
> longer than a smoke detector battery.)
> thanks-
> Hue
>
>
>

28040. diode substitution in RF probe D9B to D9J

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-02 16:08:43 UTC
From: Rob
Topic: 28040 Message: 28040

Don't know.....see
http://www.ebay.com/itm/122471544241

I'm a little foggy on this subject.
I had asked a month ago when I bought them... now that they arrived I am revisiting learning what I have in my hand.
The standard Digitial Volt Ohm Meter with a diode tester says 0.32 to 0.36 volts on all I have tested so far.

They definitely work in the KITCHIN regen circuit.

I'm not sure of the usefulness of each type of diode.
I only have the goal of simple crystal radios and RF "detector" circuits .... regen front end....

I have D9B,D9K and D2D now and waiting on D9E and D9J... usually a few weeks shipping.
All have worked so far in my simple radio projects.
And they cost less than 5 cents.
So that makes them a good candidate for kids ... scouts... newbies... projects.

I was very surprised to see voltage ratings above 30 volts.
I thought the 1N34A became the standard at 30 volts.
So 50 and 100 volts just looked way out there.

D9B USSR Germanium Detector Diode 10V 40ma 100 KHz
D9K USSR Germanium Detector Diode 30V 30ma 100 KHz
D2D USSR Germanium Detector Diode 50V 16ma 150 MHz

D9E USSR Germanium Detector Diode 50V 20ma 100 KHz
D9J USSR Germanium Detector Diode 100V 15ma 100 KHz

On 05/02/2017 10:54 AM, KB9BVN - wrote:
> What are those numbers?
>
> Max voltage? Peak Max current?
>
>
>
> On Tue, May 2, 2017 at 10:48 AM, Rob <roomberg@...> wrote:
>
>> When home brewing the Doug Hendricks or N5ESE's RF probe
>> which has 3 components...
>> D1 - 1N34A diode
>> R1 - 4.7M 1/8w resistor
>> C1 - .01uF disk ceramic capacitor (103)

>>
>> I was wondering if I can substitute the 1N34A with any or all of these:
>>
>> D9B USSR Germanium Detector Diode 10V 40ma 100 KHz
>> D9K USSR Germanium Detector Diode 30V 30ma 100 KHz
>> D2D USSR Germanium Detector Diode 50V 16ma 150 MHz
>> D9E USSR Germanium Detector Diode 50V 20ma 100 KHz
>>
>> --
>>

28041. RE: [Glowbugs] RE: [regenrx] Buying just a few resistors ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-02 19:22:57 UTC
From: Hubert Miller
Topic: 28041 Message: 28041

I want to thank everyone who commented on this question. There were multiple offers to mail me the resistors, thanks!
I thanked one gentleman who is mailing me these.
For the other suggestions, i appreciate your suggestions, and i will check them all out.
-Hue

28042. Re: [regenrx] Screwdriver adjust, locking var caps - repurpose ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-02 21:35:16 UTC
From: Charles Moizeau
Topic: 28035 Message: 28042

It's not easy to drill a hole in the exact center of the shaft.

If the shaft is brass or steel, it would be better I think to lightly tin the short stub with solder. Then use a brass or bronze coupling (and decent hardware stores usually stock bronze bearings for electric motors) with the appropriate inner diameter. Tap one end of the coupler/bearing transversely for a set screw if you want your shaft extension to be removable. If that's not needed, then use 1/4-inch brass rod (available in three-foot lengths from Lowes, and maybe Home Depot) for your extension. First solder the coupler to the short stub, and then solder the extension into the outer end of the coupler. From where the solder is applied at an opening, capillary action will suck molten solder toward the heat source.

Charles

_____
From: regenrx@yahoogroups.com <regenrx@yahoogroups.com> on behalf of Michael michael.setaazul@... [regenrx] <regenrx@yahoogroups.com>
Sent: Tuesday, May 2, 2017 8:36 AM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Screwdriver adjust, locking var caps - repurpose ?

I would drill into the shaft and thread it.
Then screw in an extension with super-glue or similar.
If sturdily built, as I would assume, given their provenance,
they might well be suitable for a VFO. In extremis, I would
extract the moving vane part and lightly sand the shaft down.

Even if it would not seem worth the effort - the challenge
certainly is! With a bit of luck DT will ban varicaps :-)

Ah, I have momentarily realised that I have a few amongst
the cobwebs in the j-box. Maybe one day...

MichaelUK
.....

On 02.05.17 06:47, Hubert Miller kargo_cult@... [regenrx] wrote:
>
>
> (I don’t recall if i included this question to regenrx as well as
> another group.)
>
>
>
> “Single bearing, locking shaft, screwdriver adjust variable capacitors.”
>
> I harvested around 20 out of a boat radio antenna coupler. These are

> real nice and clean around 200 pF variables.
>
> They are single-hole mounting. The shaft bushing is tapered and split
> near the end so a second smaller nut on the
>
> bushing, locks the shaft from turning. Only about 1/8 inch of shaft
> protrudes beyond the shaft bushing; not enough
>
> to attach any kind of knob to.
>
> How to use these? I know that as single-bearing caps, they are not
> stable enough for VFO use. But i would like to be
>
> able to use them for something.
> If i superglue a shaft extension onto the shaft end, do you think that
> joint will be strong enough to hold?
>
> There is not enough shaft protruding to use a shaft coupling.
> If i saw down the bushing length, it ruins the mounting thread.
>
> These caps are stiffer to turn than the usual broadcast radio cap.
>
> I would like to figure out a way to repurpose them for true variable
> use, not adjust and lock in place.
>
> thanks-
>
> Hue

"In the interest of Regenerating radio's lost art of Regeneration"

Yahoo Groups Links

Yahoo! Groups<http://groups.yahoo.com/group/regenrx/>
groups.yahoo.com
/

Yahoo! Groups<http://groups.yahoo.com/group/regenrx/join>
groups.yahoo.com
/

(Yahoo! ID required)

28043. Re: [regenrx] Screwdriver adjust, locking var caps - repurpose ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-02 21:59:49 UTC
From: Michael
Topic: 28035 Message: 28043

On 02.05.17 22:35, Charles Moizeau w2sh@... [regenrx] wrote:

> It's not easy to drill a hole in the exact center of the shaft.

Valid point, Charles. I envisaged using a drill stand.
As stated, I would only attempt it in extremis. Your suggestion
using a coupler to minimise the strain on the soldered stub-joint
certainly has a good chance of success. But, again, the challenge
would have to merit the effort.

MichaelUK
.....

> If the shaft is brass or steel, it would be better I think to lightly
> tin the short stub with solder. Then use a brass or bronze coupling
> (and decent hardware stores usually stock bronze bearings for electric
> motors) with the appropriate inner diameter. Tap one end of the
> coupler/bearing transversely for a set screw if you want your shaft
> extension to be removable. If that's not needed, then use 1/4-inch
> brass rod (available in three-foot lengths from Lowes, and maybe Home
> Depot) for your extension. First solder the coupler to the short stub,
> and then solder the extension into the outer end of the coupler. From
> where the solder is applied at an opening, capillary action will suck
> molten solder toward the heat source.
>
> Charles
> ---

> I would drill into the shaft and thread it.
> Then screw in an extension with super-glue or similar.
> If sturdily built, as I would assume, given their provenance,
> they might well be suitable for a VFO. In extremis, I would
> extract the moving vane part and lightly sand the shaft down.
>
> Even if it would not seem worth the effort - the challenge
> certainly is! With a bit of luck DT will ban varicaps :-)
>
> Ah, I have momentarily realised that I have a few amongst
> the cobwebs in the j-box. Maybe one day...
>
> MichaelUK
> .....

28044. Re: [Glowbugs] RE: [regenrx] Buying just a few resistors ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-02 22:55:34 UTC
From: Gordon Gwillim
Topic: 28041 Message: 28044

Speaking of the olde BC radios, the audio stages of filament type tubes often had a device riveted to the chassis wall and marked on the schematic as BC-1 or BC-2. They were (not sure that I kept one) a small cup with an insulated metal arm pressing on what looked like a carbon slug within that cup. In the 50s, these units from the 1930s still registered a volt and a half with a high resistance meter. I am sure there is more information on the Bias Cells of yesteryear within this group. The receivers that came my were in fact Rogers Majestic units. One battery powered and the other transformer powered. The battery radio needed a two volt wet cell plus three B batteries which were beyond the resources of a 12 year old. The AC operated unit was a joy to operate in the quiet environment before TV came to the farm. 73Gordon VE5UJ

From: Moe Fretz <tubetester@...>
To: Glen Zook <gzook@...>
Cc: Bill Henderson <bill.henderson@...>; Hubert Miller <Kargo_cult@...>;
"regenrx@yahoogroups.com" <regenrx@yahoogroups.com>; "tetrode@..."
<tetrode@googlegroups.com>
Sent: Tuesday, May 2, 2017 1:18 PM
Subject: Re: [Glowbugs] RE: [regenrx] Buying just a few resistors ?

As did a lot of the (10 plus tubes) early Rogers BC radios.

$-------&
Moe Fretz
Collection and Preservation
Canadian Tube Radios, Communication Equipment, Vintage Ham gear and Military Radios.
Hallicrafters, RCA, National, Hammarlund,TMC, RME and Racal.
www.radiopreservationguy.com

Don't part them out ---- Restore them.

Cambridge
Ontario Canada

28045. Does the direction of the germanium diode matter?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-03 01:05:15 UTC
From: Rob
Topic: 28045 Message: 28045

Does the direction of the germanium diode matter?

AA7U pointed out that my regens all had backwards mounted germanium diodes:
I'm not real surprised. My vision is impaired.

http://www.learnmorsecode.com/regen/03REGEN.jpg
http://www.learnmorsecode.com/regen/04top.jpg

My mistake was because I thought the red band denoted the cathode
but
nope
So I did the diode testing and concluded that D9B...red stripe
and D9K ..white stripes ... are on the ANODE side
and the D2D ....yellow blue black has yellow on the ANODE side and the
black on the CATHODE side.

http://www.learnmorsecode.com/regen/diodesstripes.jpg
http://www.learnmorsecode.com/regen/diodestripes2.jpg

So this raises the question of......
Does the direction of the germanium diode really matter in this circuit?
http://www.learnmorsecode.com/regen/00KitchinREGEN.jpg

ALL of these circuits heard Professor Arnie Coro 1,300 miles away in Cuba.

28046. Re: [regenrx] Does the direction of the germanium diode matter?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-03 02:09:16 UTC
From: Jordan Dobrikin
Topic: 28045 Message: 28046

Hi
I suggest you bring out the Diode connection(s) to Banana Jacks, Binding Posts or Fahnestock clips
so as to be able to easily reverse the Diode and see if there is any difference.

Are you sending me parts to transship to your friend in the USA?
73 de Jordan ve7jjd

Hi

Thanx
73 de Jordan ve7jjd

On Tue, May 2, 2017 at 6:05 PM, Rob roomberg@... [regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> Does the direction of the germanium diode matter?
>
> AA7U pointed out that my regens all had backwards mounted germanium diodes:
> I'm not real surprised. My vision is impaired.
>
> http://www.learnmorsecode.com/regen/03REGEN.jpg
> http://www.learnmorsecode.com/regen/04top.jpg
>
> My mistake was because I thought the red band denoted the cathode
> but
> nope
> So I did the diode testing and concluded that D9B...red stripe
> and D9K ..white stripes ... are on the ANODE side
> and the D2D ....yellow blue black has yellow on the ANODE side and the
> black on the CATHODE side.
>
> http://www.learnmorsecode.com/regen/diodesstripes.jpg
> http://www.learnmorsecode.com/regen/diodestripes2.jpg
>
> So this raises the question of......
> Does the direction of the germanium diode really matter in this circuit?
> http://www.learnmorsecode.com/regen/00KitchinREGEN.jpg
>
> ALL of these circuits heard Professor Arnie Coro 1,300 miles away in Cuba.
>
>
>

>

28047. Re: [regenrx] Does the direction of the germanium diode matter? banana jacks

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-03 02:50:37 UTC
From: Rob
Topic: 28045 Message: 28047

In anticipation of not knwoing how well each type of diode would perform
I made version ONE
with NIXIE tube sockets for the 1N34A diode.... which I swapped out with
a D9B diode:
http://www.learnmorsecode.com/regen/00kitreg02.jpg
http://www.learnmorsecode.com/regen/00kitreg05.jpg

I use WIREWRAP pins and NIXIE tube sockets to custom make cable connectors.
NIXIE tube socket pins mate loosely with WIREWRAP pins so they have to
be pinched a little to
make them mate firmly.
The idea is to have external board components easily swapped for
experimentation.

On 05/02/2017 10:09 PM, Jordan Dobrikin jjdobrikin@... [regenrx]
wrote:
> Hi
> I suggest you bring out the Diode connection(s) to Banana Jacks,
> Binding Posts or Fahnestock clips
> so as to be able to easily reverse the Diode and see if there is any
> difference.
>
> Are you sending me parts to transship to your friend in the USA?
> 73 de Jordan ve7jjd
>
> Hi
>
>
>
>
> Thanx
> 73 de Jordan ve7jjd
>
> On Tue, May 2, 2017 at 6:05 PM, Rob roomberg@...
> <mailto:roomberg@...> [regenrx] <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>> wrote:
>
> Does the direction of the germanium diode matter?
>
> AA7U pointed out that my regens all had backwards mounted
> germanium diodes:
> I'm not real surprised. My vision is impaired.
>
> http://www.learnmorsecode.com/regen/03REGEN.jpg

> <http://www.learnmorsecode.com/regen/03REGEN.jpg>
> http://www.learnmorsecode.com/regen/04top.jpg
> <http://www.learnmorsecode.com/regen/04top.jpg>
>
> My mistake was because I thought the red band denoted the cathode
> but
> nope
> So I did the diode testing and concluded that D9B...red stripe
> and D9K ..white stripes ... are on the ANODE side
> and the D2D ....yellow blue black has yellow on the ANODE side and
> the black on the CATHODE side.
>
> http://www.learnmorsecode.com/regen/diodesstripes.jpg
> <http://www.learnmorsecode.com/regen/diodesstripes.jpg>
> http://www.learnmorsecode.com/regen/diodestripes2.jpg
> <http://www.learnmorsecode.com/regen/diodestripes2.jpg>
>
> So this raises the question of......
> Does the direction of the germanium diode really matter in this
> circuit?
> http://www.learnmorsecode.com/regen/00KitchinREGEN.jpg
> <http://www.learnmorsecode.com/regen/00KitchinREGEN.jpg>
>
> ALL of these circuits heard Professor Arnie Coro 1,300 miles away
> in Cuba.
>
>
>
>

28049. Re: [regenrx] eBay

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-03 15:36:46 UTC
From: Richard
Topic: 28048 Message: 28049

Antique dealers. They know nothing,put a big price on it and see what
happens.

Richard, AA1P

On 05/03/2017 11:06 AM, 'Michael Bittner' mmab@... [regenrx] wrote:
>
> Fifty bucks for a couple of empty IF cans. What are they thinking??????
> http://www.ebay.com/itm/2-rare-tuning-capacitor-or-something-vintage-radio-amplifier-hea
t-shields-covers-/332204626045?hash=item4d58f0507d:g:7S8AAOSwCQZZCYSM
>
>
>
>
> <#DAB4FAD8-2DD7-40BB-A1B8-4E2AA1F9FDF2>
>
> ---
>

28050. Re: [regenrx] Screwdriver adjust, locking var caps - repurpose ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-04 11:41:54 UTC
From: M W
Topic: 28035 Message: 28050

A counter-suggestion; Brazing is a LOT stronger than solder, if you can arrange that (or some mechanical coupling collar) that might last a lot better than solder. Or even try JBWeld or the like :)

Mark

28051. RE: [regenrx] Screwdriver adjust, locking var caps - repurpose ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-04 18:48:42 UTC
From: Hubert Miller
Topic: 28035 Message: 28051

Is JBWeld that much stronger than superglue? I really don't know, although i have thought of giving it a try for patching up extra holes drilled in front panels. A recommended procedure
that i have read about, and i even have a regen, a National SW-5, that had some modifications that need undoing.
-Hue

>A counter-suggestion; Brazing is a LOT stronger than solder, if you can arrange that (or some mechanical coupling collar) that might last a lot better than solder. Or even try JBWeld or the like :)

  Mark

28052. Re: [regenrx] Screwdriver adjust, locking var caps - repurpose ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-04 20:24:32 UTC
From: Baruch Atta
Topic: 28035 Message: 28052

Is JBWeld that much stronger than superglue?
Yes, definitely. Don't fix your chairs with superglue.

On Thu, May 4, 2017 at 2:48 PM, Hubert Miller kargo_cult@... [regenrx] <
regenrx@yahoogroups.com> wrote:

>
>
> Is JBWeld that much stronger than superglue? I really don't know, although
> i have thought of giving it a try for patching up extra holes drilled in
> front panels. A recommended procedure
> that i have read about, and i even have a regen, a National SW-5, that had
> some modifications that need undoing.
> -Hue
>
> >A counter-suggestion; Brazing is a LOT stronger than solder, if you can
> arrange that (or some mechanical coupling collar) that might last a lot
> better than solder. Or even try JBWeld or the like :)
>
> Mark
>
>

28053. Thanks for the Add!

Yahoo group: regenrx (2016 — 2017)
Date: 2017-04-26 15:45:53 UTC
From: danieljackson@...
Topic: 28053 Message: 28053

My name is Dan, I am into modeling circuits with LTSpice, regenerative circuits have been one of my interest and a challenge. I recently turned to giving them another try. I have questions mostly, about things I should consider when I model these circuits. Rules of thumb sorts of questions mostly. Anyways thanks.

28054. Re: [regenrx] eBay

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-04 03:15:54 UTC
From: e_trician@...
Topic: 28048 Message: 28054

Those items are I.F. transformer covers.

28055. Re: [regenrx] Screwdriver adjust, locking var caps - repurpose ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-06 03:14:26 UTC
From: Charles Moizeau
Topic: 28035 Message: 28055

I agree that brazing is much stronger than solder. But, please, what is presented is not a high-torque, nor high-speed, rotational situation. Gentle and slow hand movement would really be the extent of the force being exerted upon a well-soldered mechanical junction.

If you believe otherwise, then after doing the solder job I've already described, drill a small hole transversely through the soldered junction at its maximum diameter and drive a small soft steel pin, e.g., a small nail to fit tightly in the drilled hole.

Charles

From: regenrx@yahoogroups.com <regenrx@yahoogroups.com> on behalf of Baruch Atta baruchatta@...m [regenrx] <regenrx@yahoogroups.com>
Sent: Thursday, May 4, 2017 4:24 PM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Screwdriver adjust, locking var caps - repurpose ?

Is JBWeld that much stronger than superglue?

Yes, definitely. Don't fix your chairs with superglue.

On Thu, May 4, 2017 at 2:48 PM, Hubert Miller kargo_cult@...<mailto:kargo_cult@...> [regenrx] <regenrx@yahoogroups.com<mailto:regenrx@yahoogroups.com>> wrote:

Is JBWeld that much stronger than superglue? I really don't know, although i have thought of giving it a try for patching up extra holes drilled in front panels. A recommended procedure
that i have read about, and i even have a regen, a National SW-5, that had some modifications that need undoing.
-Hue

>A counter-suggestion; Brazing is a LOT stronger than solder, if you can arrange that (or some mechanical coupling collar) that might last a lot better than solder. Or even try JBWeld or the like :)

Mark

28056. DXERS UNLIMITED'S SCRIPT HIGHLIGHTING QRP OPERATION AND MINIMALIST SIMPLE TRANSCEIVERS

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-06 20:32:28 UTC
From: Prof. Arnaldo Coro Antich
Topic: 28056 Message: 28056

Radio Havana Cuba
Dxers Unlimited weekend edition for Sunday 7 May 2017
By Arnie Coro
radio amateur CO2KK

Hola mis amigos radioaficionados that are now listening to the weekend edition of Dxers Unlimited...I am Arnaldo, Arnie, Coro radio amateur CO2KK, your host here at the one and only radio hobby program on the air and on the web providing coverage to every one of the more than 90 ways of enjoying this wonderful hobby....RADIO. A quick check shows that more and more radio amateurs are using sophisticated digital communications modes that require the use of really high performance computers... Other ham operators that run older machines still have the option to use the easy digital mode... PSK31 and its higher speed versions like PSK63 and PSK125... and here is today's program first topic...Radio amateurs in the Caribbean region, Central America, Mexico and the Southern United States are getting ready to deal with the upcoming Tropical Hurricane Season, due to start on the first day of June, although this year a very rare tropical cyclone developed out of season, surprising scientists that carefully tracked the storm... So far I have not heard about the season's forecast that is published every year ahead of the start of the six months long period that spans from the first of June to the end of November... Preparations for providing emergency communications is at the top of the list of activities by Cuban radio clubs .
Item two: Amazing two way amateur radio contacts on the 80 and 40 meters bands are happening almost every day while using power outputs into the antennas of one Watt of even less. Minimalist transceivers that use the output power transistor as the receiver input product detector have shown that when propagation conditions are normal or above normal, two way contacts can be made using such low power rigs that follow the design criteria of the minimalist PIXIE transceivers . Si amigos, yes my friends, a low parts count little transmit and receive capable home assembled rig when connected to an efficient antenna will be able to establish long distance contacts ...
Item three: Answering a question sent by listeners from Australia... that wanted to know more about the DRM Digital Radio Mondiale system... Yes amigos, it is exactly what is happening, what continues stop to a standstill the introduction of DRM is certainly be the lack of low and medium cost receivers capable of picking up DRM signals And yes, we have confirmed from two independent source that about an integrated circuit capable of demodulating all possible transmission modes, including standard AM, FM, and several of the already on the air digital radio modes, like DRM, the IBOC or HD Radio and all different DAB modes....is expected to the licensed for production by several IC manufacturers . As

expected massive production of this new digital integrated circuit that automatically detects the modulation mode in use , producing clear audio output, could be the much needed breakthrough every one is expecting in order to introduce the most efficient digital modes at a worldwide scale....
Now from Dxers Unlimited's weekend edition... a short form solar activity update.... The Sun is once again going through another period of very low activity, but for the past several days we have seen sunspots every day...
Each of the weekly solar and geomagnetic indicators that are tracked were lower this week. Average daily sunspot number dropped 10.6 points to 25.1, and average daily solar flux was 4.5 points lower than the previous week at 76.9.
It is comforting to see though that we have not witnessed a day with 0 sunspots since April 17. Average planetary and mid-latitude A index were both 5.6, down from the previous week which had planetary A index at 26.4 and mid-latitude at 18.4. The A index is expected to remain quiet until May 17-20.
Stand by now for a few seconds as we go to a break for a station ID. I am Arnie Coro in La Habana Cuba

short musical intercut

This is Radio Havana Cuba, the name of the show is Dxers Unlimited, and yes amigos we are very proud of having helped many short wave listeners around the world learn about the existence of amateur radio, leading the way for many of them to now own and operate their own amateur radio service stations to communicate across town on two meters or half way around the world on the most used DX band... 20 meters.... By the way, I enjoy a lot calling CQ DX on 14 060 kiloHertz using slow speed hand sent Morse Code Radiotelegraphy while running 5 Watts or less into a wire antenna that was made from recycled wire coming from a burnt out power transformer primary winding. The three insulators required were made using poliethilene flexible garden hose stock of three quarters of an inch diameter.... That is a low cost antenna by all comparisons... because it is fed using a two wires balanced transmission line also made from the same recycled wire and insulators for the ladder type feed line cut from the same length of poliethilene garden hose. As I have said it here many times.... amateur radio need not be an expensive hobby at all, and my dipole antenna is just another example... It is cut as a full size 60 meters band half wave dipole, and tunes easily from 80 meters all the way up to the 10 meters band, and let me add that using a second antenna tuner especially made for the six meters band the antenna works nicely on the 50 megaHertz band too...
5 watts CW on the 20 meters QRP calling frequency 14060 kiloHertz has made possible contacts as far away as New Zealand under good propagation conditions, and as expected many replies to my CQ calls from CO2KK are received from the first skip zone of 20 meters that spans for around two to three thousand kilometers away from La Habana, Cuba where my station is located. Whenever very short skip is present on 20 meters , I just move to the six meters band and start calling CQ DX, because the very

short skip on 20 meters is a very good indicator of possible sporadic E openings on six meters. Let me insist on something said earlier this week....Amateur radio operators having stations capable of operating on the 10 and 6 meter bands will be able to make many DX contacts on those two bands during the summer Sporadic E season that is now starting... But.... the real challenge brought by Sporadic E layer events is that so far they have proven to be impossible to predict... there is no known forecasting method that can tell in advance when one of such super density sporadic E layer patches starts suddenly bringing in DX signals for periods as short as a few minutes or maybe even hours and then suddenly just vanish...And let me also insist on the fact that for 6 meters band operators the sporadic E events make possible working DX stations several hundreds of miles away, with the first skip zone area coming after a zone of no signals... There is also the possibility of double and triple hop skip signals when two or three patches of high density sporadic E clouds align themselves properly...
And now at the end of the program here is our propagation update and forecast for the next several days--- solar activity still at very low levels, just a few weak sunspots active regions in sight Saturday morning local time here in Havana.... 14 hours UTC... when I was typing the script of this program you are listening to right now. Be on the look out for more sporadic E openings... it is now clear that the late spring and summer E skip season is well under way...AMIGOS please don't forget to set aside a little time to send me a signal report and your most appreciated comments and radio hobby related questions to Dxers Unlimited. Send mail to inforhc at enet dot cu ... Via Air Mail to Arnie Coro, Radio Havana Cuba, Havana , Cuba

28057. Simple Regen from Taiwan

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-07 20:21:23 UTC
From: willard561@...
Topic: 28057 Message: 28057

Here's 2 simple Regen from a Taiwan website
http://motivationtolearn.org/wordpress/?p=1130#more-1130
http://motivationtolearn.org/wordpress/?p=1130#more-1130
http://motivationtolearn.org/wordpress/?p=1606
http://motivationtolearn.org/wordpress/?p=1606

28058. RE: [regenrx] Simple Regen from Taiwan

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-07 20:40:53 UTC
From: Hubert Miller
Topic: 28057 Message: 28058

Pretty interesting little site, thanks!
I agree that the homemade variable cap is just too much work!
I enjoyed reading about the SW loop set. Author's comments on excellent results mirror Don's (VE3....) posts here about his loop sets, also reminds me of the "Jade Products" 40 and 80 meter
loop receiver kit from a few years back.

Here is a question. On the variometer tuned circuit shown in URL below, is suggested to make the coil form out of a band of stiff plastic. I need to make exactly such a coilform to restore an old
kit radio from 1960. The coil is around 8 inches in diameter, it's actually the pickup loop antenna. The old plastic form is deformed and weak. Anyone suggest a source of fairly stiff sheet plastic
that can be bent into a circle and glued, and will hold its circle shape? thanks-
Hue

>Here's 2 simple Regen from a Taiwan website
http://motivationtolearn.org/wordpress/?p=1130#more-1130
http://motivationtolearn.org/wordpress/?p=1606

Posted by: mailto:willard561

28059. 250 and 750 volt power supply questions

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-10 02:07:57 UTC
From: Rob
Topic: 28059 Message: 28059

I have an upcoming tube project that defines its power needs as
6.3 volts and 250 volts and 750 volts.

Its been 16 years since I rebuilt a tube rig power supply so I have some
questions.

Here is a HEATHKIT HP 23 power supply schematic:
http://www.learnmorsecode.com/regen8/hp-23-schematica2.jpg

If I had this power supply..... or ... more likely.....the parts to
build it... from the bottom up...

1. could I LEAVE OUT the PURPLE 12 volt wire?

2. could I LEAVE OUT all of the RED bias components?

3. could I hardwire all of the YELLOW 250V circuit to the 95 VAC?

4. could I knock down the GREEN 820V circuit to 750V by adding the
BLUE string of 1N4007 diodes?

5. If I could not obtain the original transformer then would it be OK
to use three transformers
for each of the original voltages of 268 volts and 95 volts and 6.3
volts.....
and tie each of the MINUS ground side of each of the DC circuits together ?

28060. Re: [regenrx] 250 and 750 volt power supply questions

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-10 04:37:55 UTC
From: Jim Scott
Topic: 28059 Message: 28060

See my comments below...

-----Original Message-----
From: Rob roomberg@ptd.net [regenrx] [mailto:regenrx@yahoogroups.com]
Sent: Tuesday, May 9, 2017 09:07 PM
To: regenrx@yahoogroups.com
Subject: [regenrx] 250 and 750 volt power supply questions

I have an upcoming tube project that defines its power needs as
6.3 volts and 250 volts and 750 volts.

Its been 16 years since I rebuilt a tube rig power supply so I have some questions.

Here is a HEATHKIT HP 23 power supply schematic:
http://www.learnmorsecode.com/regen8/hp-23-schematica2.jpg

If I had this power supply..... or ... more likely.....the parts to build it... from the bottom up...

1. could I LEAVE OUT the PURPLE 12 volt wire?
----Interestingly, that transformer output is 12.6V CT, so you could use either 12V tubes or 6V tubes. If you want to use only 6V tubes, it would be good (but not required) to balance current in each leg of the transformer secondary by using the same number of tubes on each side. Of course, you need to take into account the total current required, what is available, and not exceed it.

2. could I LEAVE OUT all of the RED bias components?
----If you do not need any negative grid voltages.

3. could I hardwire all of the YELLOW 250V circuit to the 95 VAC?
----Yes, it is shown as an option. The 1N4007 diode (1000V PIV) is the one to keep spares in your junk box. they are cheap too!

4. could I knock down the GREEN 820V circuit to 750V by adding the BLUE string of 1N4007 diodes?
----The circuit is a voltage doubler, and should develop about 1.41xVsec or about 758VDC, where Vsec is the secondary RMS voltage of the transformer. The circuit will require only a single 1N4007 diode in each leg of the circuit, not two.

5. If I could not obtain the original transformer then would it be OK to use three transformers
for each of the original voltages of 268 volts and 95 volts and 6.3 volts......
and tie each of the MINUS ground side of each of the DC circuits together ?
----Yes, each winding is independent, you are only referencing them to the single point. The currents in each circuit are returned to their respective supply.

73,

Jim Scott
WB0IYC
Life Member ARRL
FISTS 15327
Joplin, MO EM27RC
http://www.wb0iyc.com

The whole universe is waiting...
http://www.jpl.nasa.gov/

28061. Re: [regenrx] 250 and 750 volt power supply questions #4 2 diodes

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-10 05:02:53 UTC
From: Rob
Topic: 28059 Message: 28061

I'm not sure I understand the #4 answer.
I thought it was a voltage tripler.... 268 VAC becomes 820 VDC
and as is now has D1 D2 D3 D4 diodes.
Are you saying DROP out D2 and D4 ?

> http://www.learnmorsecode.com/regen8/hp-23-schematica2.jpg
>
>
>
> 4. could I knock down the GREEN 820V circuit to 750V by adding
> the BLUE string of 1N4007 diodes?
> ----The circuit is a voltage doubler, and should develop about
> 1.41xVsec or about 758VDC, where Vsec is the secondary RMS voltage
> of the transformer. The circuit will require only a single 1N4007
> diode in each leg of the circuit, not two.
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28062. Re: 250 and 750 volt power supply questions

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-10 10:03:23 UTC
From: les.au49@...
Topic: 28059 Message: 28062

I make the following observation regarding the GREEN circuit.
(1) The circuit is a voltage DOUBLER.
(2) The transformer RMS voltage is 268 volts AC RMS.
The PEAK voltage is 1.41 * 268 volts.
But the circuit is a doubler, so you'll get (approx) 755 volts.
(268 * 1.41 * 2) volts
Remember - there will be a small voltage drop across the diodes.
The transformer is designed to deliver the rated voltage at the rated
current. When the load is light the voltage will be higher.
(3) IF you use two diodes in series (4 diodes in all) add high
value equalizing resistors across both diodes. eg 1.5 or
2.2 Meg (rated at the working voltage).

I would protect each winding with a fuse. Use "safe" fuse-holders - a holder
that does not allow contact with high voltage when the fuse is
replaced/removed.
I would add an indicator to show complete discharge of capacitors - eg neon
+ limiting resistor.
If you want, you can put the filter choke in the negative supply line.
This has the advantage that the choke winding is at a low potential.
If the winding shorts you'll see less damage.

750V must be treated with respect.

Les

28063. Re: [regenrx] Re: 250 and 750 volt power supply questions 2.2 meg

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-10 11:56:42 UTC
From: Rob
Topic: 28059 Message: 28063

Thanks for the input Les.

What is the purpose of th equalizing resistors across diodes?

And

why is there a 6 Henrie choke on the YELLOW circuit but no filter choke
on the GREEN circuit ?

http://www.learnmorsecode.com/regen8/hp-23-schematica2.jpg

On 05/10/2017 06:03 AM, les.au49@... [regenrx] wrote:
>
> I make the following observation regarding the GREEN circuit.
> (1) The circuit is a voltage DOUBLER.
> (2) The transformer RMS voltage is 268 volts AC RMS.
> The PEAK voltage is 1.41 * 268 volts.
> But the circuit is a doubler, so you'll get (approx) 755 volts.
> (268 * 1.41 * 2) volts
> Remember - there will be a small voltage drop across the diodes.
> The transformer is designed to deliver the rated voltage at the
> rated
> current. When the load is light the voltage will be higher.
> (3) IF you use two diodes in series (4 diodes in all) add high
> value equalizing resistors across both diodes. eg 1.5 or
> 2.2 Meg (rated at the wo rking voltage).
>
> I would protect each winding with a fuse. Use "safe" fuse-holders -
> a holder
> that does not allow contact with high voltage when the fuse is
> replaced/removed.
> I would add an indicator to show complete discharge of capacitors -
> eg neon
> + limiting resistor.
> If you want, you can put the filter choke in the negative supply line.
> This has the advantage that the choke winding is at a low potential.
> If the winding shorts you'll see less damage.
>
> 750V must be treated with respect.
>
> Les
>
>

28064. Re: [regenrx] 250 and 750 volt power supply questions #4 2 diodes

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-10 14:56:26 UTC
From: Jim Scott
Topic: 28059 Message: 28064

Short explanation:

RED goes positive: Current path=D3(D4), C1, RED/YEL | D1(D2) blocking
RED/YEL goes positive: Current path=C2, GND, D1(D2), RED | D3(D4) blocking
Output Current path: C1+C2 to load

Capacitor input power supplies charge to Vp and then discharge during the latter half of the cycle. Ripple comes from the relationship of charge stored in the capacitor, time delay before next charge cycle, and discharge. IN other words, under heavy load there can be excessive ripple.
The choke is used for smoothing the ripple, at the expense of an overall reduction in voltage at the output.

73,

Jim Scott
WB0IYC
Life Member ARRL
FISTS 15327
Joplin, MO EM27RC
http://www.wb0iyc.com

We can see the beginning...
http://www.webbtelescope.org

-----Original Message-----
From: Rob roomberg@... [regenrx] [mailto:regenrx@yahoogroups.com]
Sent: Wednesday, May 10, 2017 12:02 AM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] 250 and 750 volt power supply questions #4 2 diodes

I'm not sure I understand the #4 answer.
I thought it was a voltage tripler.... 268 VAC becomes 820 VDC
and as is now has D1 D2 D3 D4 diodes.
Are you saying DROP out D2 and D4 ?

http://www.learnmorsecode.com/regen8/hp-23-schematica2.jpg

4. could I knock down the GREEN 820V circuit to 750V by adding the BLUE string of 1N4007 diodes?
----The circuit is a voltage doubler, and should develop about 1.41xVsec or about 758VDC, where Vsec is the secondary RMS voltage of the transformer. The circuit will require only a single 1N4007 diode in each leg of the circuit, not two.

28065. Re: [regenrx] 250 and 750 volt power supply questions #4 2 diodes

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-10 15:32:17 UTC
From: Jim Pruitt
Topic: 28059 Message: 28065

If you move D2 and D1 down to the Red/yellow transformer lead with cathode pointing to transformer and then tie the second (D1) diode anode to the cathode of D4 you will have a full wave rectifier (not a bridge). So 268 x 1.414 = 378v and the electrolytics would bump it up a bit more but you are correct, as shown it is a voltage tripler so making it a voltage doubler would give you 536v and the electrolytics would bump it up some.

There is one thing to watch for in these situations. I got bit a few times in the 70's with it.When turning a power supply off you will get a voltage spike and that spike can be 3 times the regular voltage so you can loose a diode string because of it. I did that a couple times. I had a power supply that worked great and one day it failed to come on. I was talking to a Tektronix engineer friend and re told me about the fact that you get a spike when powering down and while it failed to come on it was because the string had popped when I last turned it off but I did not know it til I tried to turn it on again. I used that power supply for quite a while before that happened too!

Does that help or did I just make things more confusing?

Thank you.

Jim

On 5/9/2017 10:02 PM, Rob roomberg@... [regenrx] wrote:
>
> I'm not sure I understand the #4 answer.
> I thought it was a voltage tripler.... 268 VAC becomes 820 VDC
> and as is now has D1 D2 D3 D4 diodes.
> Are you saying DROP out D2 and D4 ?
>
>> http://www.learnmorsecode.com/regen8/hp-23-schematica2.jpg
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>> 4. could I knock down the GREEN 820V circuit to 750V by adding
>> the BLUE string of 1N4007 diodes?
>> ----The circuit is a voltage doubler, and should develop about
>> 1.41xVsec or about 758VDC, where Vsec is the secondary RMS
>> voltage of the transformer. The circuit will require only a
>> single 1N4007 diode in each leg of the circuit, not two.
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28066. Re: [regenrx] Re: 250 and 750 volt power supply questions

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-12 15:35:14 UTC
From: Rob
Topic: 28059 Message: 28066

Perhaps this is a really dumb question but I'll ask anyway.
I have a collection of never used transformers I picked up over the years with the intention
of putting into service in tube radios.

Some have markings.... some are mystery meat.
I figured it would be easy enough to some day OHM out the coils and figure out which are pairs and center tapped.

some are marked 400-0-400
some are marked 700 volts.

So here is my question:

Is there a reason to use a voltage doubler circuit on a 300 volt transformer as was done in an original
factory built receiver that uses a 700 volt tube circuit OR is there nothing wrong with using one of
my 700 volt transformers to build that circuit?

28067. Re: [regenrx] Re: 250 and 750 volt power supply questions

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-12 21:02:53 UTC
From: Jordan Dobrikin
Topic: 28059 Message: 28067

Hi
Tit for Tat IMHO.
What Radio?
Choose Xfmr(s) that will give the power/amperes needed.
73 de Jordan ve7jjd

Hi

Thanx
73 de Jordan ve7jjd

On Fri, May 12, 2017 at 8:35 AM, Rob roomberg@... [regenrx] <
regenrx@yahoogroups.com> wrote:

>
>
> Perhaps this is a really dumb question but I'll ask anyway.
> I have a collection of never used transformers I picked up over the years
> with the intention
> of putting into service in tube radios.
>
> Some have markings.... some are mystery meat.
> I figured it would be easy enough to some day OHM out the coils and figure
> out which are pairs and center tapped.
>
> some are marked 400-0-400
> some are marked 700 volts.
>
> So here is my question:
>
> Is there a reason to use a voltage doubler circuit on a 300 volt
> transformer as was done in an original
> factory built receiver that uses a 700 volt tube circuit OR is there
> nothing wrong with using one of
> my 700 volt transformers to build that circuit?
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28068. Re: [regenrx] Re: 250 and 750 volt power supply questions

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-12 21:30:48 UTC
From: Rob
Topic: 28059 Message: 28068

http://www.learnmorsecode.com/regen8/100wTX.JPG
http://www.qsl.net/wd8das/dream.html

On 05/12/2017 05:02 PM, Jordan Dobrikin jjdobrikin@... [regenrx]
wrote:
> Hi
> Tit for Tat IMHO.
> What Radio?
> Choose Xfmr(s) that will give the power/amperes needed.
> 73 de Jordan ve7jjd
>
> Hi
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> Thanx
> 73 de Jordan ve7jjd
>
> On Fri, May 12, 2017 at 8:35 AM, Rob roomberg@...
> <mailto:roomberg@...> [regenrx] <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>> wrote:
>
> Perhaps this is a really dumb question but I'll ask anyway.
> I have a collection of never used transformers I picked up over
> the years with the intention
> of putting into service in tube radios.
>
> Some have markings.... some are mystery meat.
> I figured it would be easy enough to some day OHM out the coils
> and figure out which are pairs and center tapped.
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> Is there a reason to use a voltage doubler circuit on a 300 volt
> transformer as was done in an original
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> my 700 volt transformers to build that circuit?
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28069. Re: [regenrx] Re: 250 and 750 volt power supply questions

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-12 21:42:26 UTC
From: Phil
Topic: 28059 Message: 28069

Hi,

Been building, repairing and "parting out" radios for 60+ years. "Volts
is Volts". So long as you can get the desired Voltage and current,
AND it is clean, I.E. no ripple or noise riding on it as some switching
supplies have, it should work just fine for you. Of course there are
some ways of getting that Voltage that is more aesthetically pleasing to
the eye, or makes common sense. Yes, you 'could' build a supply that
provides 300 Volta at 20 Amps and power a 1 tube regen receiver
requiring maybe 10mA with it, but it's not very practical.

WHATEVER YOU DO, keep SAFETY foremost in mind, making sure there isn't
any shock hazard to the user or pets or other visitors to the shack,
nor does it create a fire hazard. . .

73 de Phil, KO6BB.
Specializing in DXing NDBs (Longwave Beacons).

Location: "The Beaconeer's Lair".
Merced, Central California, 37,18,37N 120,30,6W CM97rh
http://www.qsl.net/ko6bb/

HF/LF RADIOS:
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
PORTABLES: Realistic DX380, Grundig G6 Aviator, Grundig S450DLX
Icom: IC-7200 Xceiver, DSP IF & filters (~2015).
Kenwood: TS-450SAT Xceiver, cascaded 250/125Hz Inrad filters.
SDR: Softrock Ensemble II LF (built from a kit 2017).

ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 4 Port Antenna Multicoupler, Feeds 4 RX's.
AF Filters: Timewave DSP-599zx & HOMEBREW 8 Hz Filter.

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.
Cushcraft AR-10 Ringo at 14 feet AGL.

On 5/12/2017 9:30 PM, Rob roomberg@... [regenrx] wrote:
>>
>> On Fri, May 12, 2017 at 8:35 AM, Rob roomberg@...
>> <mailto:roomberg@...> [regenrx] <regenrx@yahoogroups.com
>> <mailto:regenrx@yahoogroups.com>> wrote:
>>
>> Perhaps this is a really dumb question but I'll ask anyway.
>> I have a collection of never used transformers I picked up over
>> the years with the intention

>> of putting into service in tube radios.
>>
>> Some have markings.... some are mystery meat.
>> I figured it would be easy enough to some day OHM out the coils
>> and figure out which are pairs and center tapped.
>>
>> some are marked 400-0-400
>> some are marked 700 volts.
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>> So here is my question:
>>
>> Is there a reason to use a voltage doubler circuit on a 300 volt
>> transformer as was done in an original
>> factory built receiver that uses a 700 volt tube circuit OR is
>> there nothing wrong with using one of
>> my 700 volt transformers to build that circuit?
>>

28070. Power Line Filter - 12v @ Some Ungodly Number of Amps

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-13 17:20:34 UTC
From: J Ed
Topic: 28070 Message: 28070

I've been thinking of how to solve a problem. This can effect any of us who use direct conversion receivers, which includes regenerative receivers in a way.

If you're not using a switch mode power supply to power your projects (be it a 12v one, or something more exotic), chances are there are such a power supply in the vicinity of your receiver or antenna. They tend to kick out switching noise in all directions, particularly the cheaper ones which might not be designed for low noise.

My intent is to make a seven-pole filter for a DC line, which would block noise coming in from the power lead. My problem is making it for a 30 amp capacity, as my main power supply can put out this much and powers my radio transceiver. The supply of inductors capable of handling 30 amps is not wide and various.

If I were doing this for a QRP transceiver or a receiver, I'd have no problem in making a simple filter. I'm just wondering if anyone has tips on constructing a high-current filter like this. The goal is to make something that blocks noise from power supply cables and the power supply itself, so I get an overall reduction of switching noise in the MF/HF bands of 80 dB or more.

Ed AE7TE

28071. Re: [regenrx] Power Line Filter - 12v @ Some Ungodly Number of Amps

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-13 17:38:24 UTC
From: Bill Cromwell
Topic: 28070 Message: 28071

Hi Ed,

My solution to eliminating noise coming in on the power line is the use of batteries. I use then even with tube gear sometimes. Higher powered (100 watts +) might be less practical but mobile radios from a few dozen years ago with tubes produced 100 watts+ with batteries. But that is not in your receiver! I have 100 watt solid state transceiver and it runs full bore with a little less than 20 amps. A car battery runs it for a long time. What are you running?

73,

Bill KU8H

On 05/13/2017 01:20 PM, J Ed jedwardsat1@... [regenrx] wrote:
>
> I've been thinking of how to solve a problem. This can effect any of
> us who use direct conversion receivers, which includes regenerative
> receivers in a way.
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> If you're not using a switch mode power supply to power your projects
> (be it a 12v one, or something more exotic), chances are there are
> such a power supply in the vicinity of your receiver or antenna. They
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> My intent is to make a seven-pole filter for a DC line, which would
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> If I were doing this for a QRP transceiver or a receiver, I'd have no
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> tips on constructing a high-current filter like this. The goal is to
> make something that blocks noise from power supply cables and the
> power supply itself, so I get an overall reduction of switching noise
> in the MF/HF bands of 80 dB or more.
>
> Ed AE7TE
>
>

--
bark less - wag more

28073. Re: [regenrx] Power Line Filter - 12v @ Some Ungodly Number of Amps

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-13 18:41:20 UTC
From: Bill Cromwell
Topic: 28070 Message: 28073

Hi Ed,

I like to 'overbuild' too. If it is for an AC powered DC supply what
about installing the filter on the AC input side? The current will be
much lower there - certainly less than 5 amps. more like 2 or 3 amps.
Smaller parts will be suitable there.

73,

Bill KU8H

On 05/13/2017 01:48 PM, J Ed jedwardsat1@... [regenrx] wrote:
> I run an Icom IC-718. Most SSB transmissions I make might peak at 20A
> but I normally see the meter around 5-7 amps. On CW, the current
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> power supply is a QJE model, which I got from Universal Radio after
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> line and leave it there at all times.
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> Otherwise, I could just build a smaller filter in the chassis of the
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> nearly as much strength as one for 10A.
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> On Sat, May 13, 2017 at 8:38 PM, Bill Cromwell wrcromwell@...
> <mailto:wrcromwell@...> [regenrx] <regenrx@yahoogroups.com
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28074. Re: [regenrx] Power Line Filter - 12v @ Some Ungodly Number of Amps

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-13 18:58:59 UTC
From: J Ed
Topic: 28070 Message: 28074

Hi Bill,

That's a good idea. Such a filter can be salvaged from a dead microwave.

The reasoning for the low side filter is to place a filter box right next to the unit under test, connected with inches of power wire. Even though a 12v DC line is low impedance, the filter will reduce switching noise generated by the supply as well as noise picked up by the wiring.

Some power supplies suppress noise better than others, but I've found that a 30 amp linear DC supply is going to be next to prohibitive to build. Finding a 16v AC, 50 amp transformer is going to be an extreme challenge.

Ed AE7TE

On May 13, 2017 21:41, "Bill Cromwell wrcromwell@... [regenrx]" < regenrx@yahoogroups.com> wrote:

Hi Ed,

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28075. Re: [regenrx] Power Line Filter - 12v @ Some Ungodly Number of Amps

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-13 19:27:20 UTC
From: Bill Cromwell
Topic: 28070 Message: 28075

Hi Ed,

Look at garage sales for old Automotive battery chargers -some can
exceed 50 amps - for the iron. Most of those also have a high current
ammeter. I have set the iron and the meter from one of those aside for a
"big honking" power supply here.

73,

Bill KU8H

On 05/13/2017 02:58 PM, J Ed jedwardsat1@... [regenrx] wrote:
> Hi Bill,
>
> That's a good idea. Such a filter can be salvaged from a dead microwave.
>
> The reasoning for the low side filter is to place a filter box right
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28076. OT: Need schematic for Samlex RPS1215 PS

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-13 20:49:46 UTC
From: Phil
Topic: 28076 Message: 28076

Hi,

Looking for a schematic or manual pdf of a Samlex RPS1215 PS.

A ham friend brought one (15-20 Amp PS) to me for repair. Usually I find Power Supplies a fairly easy 'fix', I've probably done hundreds of them.

Anywhoo, this one was blowing fuses and I quickly found that the 10 Amp diodes on the regulator board were shorted. The big honkin' bridge rectifier was good.

I replaced the 100PIV 3Amp axial lead diodes on the board with a pair of similar (but 100PIV 10 Amp) diodes. Put in a new fuse, checked it out and the critter put out a regulated 13.8V like it should.

Put the "load tester" (a modified auto battery load tester) on it and slowly brought the current up. As soon as the current reached 10 Amps (it's rated 15A continuous, 20 Amp peak) the fuse again blew and this time the big honkin' main bridge rectifier was shorted, the two on the board that I replaced were OK. I don't have that bridge rectifier and need to order some.

But I can't just keep stuffin' rectifiers in it, I need to find the REAL reason it's acting up. By the way, this seems to be much more cheaply made than the typical Astron Supply which I'm VERY familiar with.

At this point the owner told me to just part it out as he's bought a new Astron, but I WOULD like to fix it and give it back as a spare if I could.

Problem is, I've done a pretty thorough Google search for a schematic (or other info). Only thing that turned up was some schematics for Samlex products with similar model numbers in the UK, but they ARE NOT the same thing, their usually battery chargers or similar products, nothing the same circuit wise. I just hate to let something as simple as a PS get the better of me . . .

--

--
73 de Phil, KO6BB.
Specializing in DXing NDBs (Longwave Beacons).

Location: "The Beaconeer's Lair".
Merced, Central California, 37,18,37N 120,30,6W CM97rh
http://www.qsl.net/ko6bb/

HF/LF RADIOS:
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)

PORTABLES: Realistic DX380, Grundig G6 Aviator, Grundig S450DLX
Icom: IC-7200 Xceiver, DSP IF & filters (~2015).
Kenwood: TS-450SAT Xceiver, cascaded 250/125Hz Inrad filters.
SDR: Softrock Ensemble II LF (built from a kit 2017).

ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 4 Port Antenna Multicoupler, Feeds 4 RX's.
AF Filters: Timewave DSP-599zx & HOMEBREW 8 Hz Filter.

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.
Cushcraft AR-10 Ringo at 14 feet AGL.

28077. Re: [regenrx] Power Line Filter - 12v @ Some Ungodly Number of Amps

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-13 23:33:57 UTC
From: Will Kimber
Topic: 28070 Message: 28077

Hi,

Why not put a simple 30 filter in the lead from power supply and then
build into the rig(s) a GOOD filter and put it in the power lead to RX
part of rig. Noise on the power in TX, well not good, will not upset
your listening.

On 05/14/2017 06:58 AM, J Ed jedwardsat1@... [regenrx] wrote:
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> Hi Bill,
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> > > If I were doing this for a QRP transceiver or a receiver, I'd
> > have no
> > > problem in making a simple filter. I'm just wondering if
> anyone has
> > > tips on constructing a high-current filter like this. The goal
> is to
> > > make something that blocks noise from power supply cables and the
> > > power supply itself, so I get an overall reduction of switching
> > noise
> > > in the MF/HF bands of 80 dB or more.
> > >
> > > Ed AE7TE
> > >
> > >
> >
> > --
> > bark less - wag more
> >
> >
> >
>
> --
> bark less - wag more
>
>
>

28078. Re: [regenrx] Power Line Filter - 12v @ Some Ungodly Number of Amps

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-14 18:32:18 UTC
From: J Ed
Topic: 28070 Message: 28078

Every 10 dB of noise reduction is a bonus. If I can place a filter on every power line, all the better. Problem will be, if I do all that and it still gets into the antenna because of all the devices in the house and otherwise.

Sometimes I think it would be better to eschew home operating and go portable.

Ed AE7TE

On May 14, 2017 02:34, "Will Kimber zl1tao@... [regenrx]" <regenrx@yahoogroups.com> wrote:

>
>
> Hi,
>
>
> Why not put a simple 30 filter in the lead from power supply and then
> build into the rig(s) a GOOD filter and put it in the power lead to RX
> part of rig. Noise on the power in TX, well not good, will not upset your
> listening.
>
> On 05/14/2017 06:58 AM, J Ed jedwardsat1@... [regenrx] wrote:
>
>
> Hi Bill,
>
> That's a good idea. Such a filter can be salvaged from a dead microwave.
>
> The reasoning for the low side filter is to place a filter box right next
> to the unit under test, connected with inches of power wire. Even though a
> 12v DC line is low impedance, the filter will reduce switching noise
> generated by the supply as well as noise picked up by the wiring.
>
> Some power supplies suppress noise better than others, but I've found that
> a 30 amp linear DC supply is going to be next to prohibitive to build.
> Finding a 16v AC, 50 amp transformer is going to be an extreme challenge.
>
> Ed AE7TE
>
> On May 13, 2017 21:41, "Bill Cromwell wrcromwell@gmail.com [regenrx]" <
> regenrx@yahoogroups.com> wrote:
>
>
>
>
> Hi Ed,

>
> I like to 'overbuild' too. If it is for an AC powered DC supply what
> about installing the filter on the AC input side? The current will be
> much lower there - certainly less than 5 amps. more like 2 or 3 amps.
> Smaller parts will be suitable there.
>
> 73,
>
> Bill KU8H
>
>
> On 05/13/2017 01:48 PM, J Ed jedwardsat1@... [regenrx] wrote:
> > I run an Icom IC-718. Most SSB transmissions I make might peak at 20A
> > but I normally see the meter around 5-7 amps. On CW, the current
> > reading measures 10-12 amps when I have it cranked up to 100 watts. My
> > power supply is a QJE model, which I got from Universal Radio after
> > waiting three weeks to find out that the other one I had ordered was
> > not in stock (link:
> > http://www.universal-radio.com/catalog/hamps/4912.html)
> >
> > The point is not that I need 30 amps for receivers. The idea is for me
> > to build a stout filter for DC switching noise that can be left in my
> > power line at all times. Not that I really need to put 30A into a
> > receiver/transceiver, but more like I want to put the filter in the
> > line and leave it there at all times.
> >
> > Otherwise, I could just build a smaller filter in the chassis of the
> > receiver (if I'm building my own). A DC filter for 500 mA doesn't need
> > nearly as much strength as one for 10A.
> >
> > Ed AE7TE
> >
> > <http://www.avg.com/email-signature?utm_medium=email&utm_
> source=link&utm_campaign=sig-email&utm_content=webmail>
> > Virus-free. www.avg.com
> > <http://www.avg.com/email-signature?utm_medium=email&utm_
> source=link&utm_campaign=sig-email&utm_content=webmail>
> >
> >
> >
> > On Sat, May 13, 2017 at 8:38 PM, Bill Cromwell wrcromwell@...
> > <mailto:wrcromwell@...> [regenrx] <regenrx@yahoogroups.com
> > <mailto:regenrx@yahoogroups.com>> wrote:
> >
> > Hi Ed,
> >
> > My solution to eliminating noise coming in on the power line is
> > the use
> > of batteries. I use then even with tube gear sometimes. Higher
> > powered

> > (100 watts +) might be less practical but mobile radios from a few
> > dozen
> > years ago with tubes produced 100 watts+ with batteries. But that
> > is not
> > in your receiver! I have 100 watt solid state transceiver and it runs
> > full bore with a little less than 20 amps. A car battery runs it
> > for a
> > long time. What are you running?
> >
> > 73,
> >
> > Bill KU8H
> >
> >
> >
> > On 05/13/2017 01:20 PM, J Ed jedwardsat1@...
> > <mailto:jedwardsat1@...> [regenrx] wrote:
> > >
> > > I've been thinking of how to solve a problem. This can effect any of
> > > us who use direct conversion receivers, which includes regenerative
> > > receivers in a way.
> > >
> > > If you're not using a switch mode power supply to power your
> > projects
> > > (be it a 12v one, or something more exotic), chances are there are
> > > such a power supply in the vicinity of your receiver or antenna.
> > They
> > > tend to kick out switching noise in all directions, particularly the
> > > cheaper ones which might not be designed for low noise.
> > >
> > > My intent is to make a seven-pole filter for a DC line, which would
> > > block noise coming in from the power lead. My problem is making
> > it for
> > > a 30 amp capacity, as my main power supply can put out this much and
> > > powers my radio transceiver. The supply of inductors capable of
> > > handling 30 amps is not wide and various.
> > >
> > > If I were doing this for a QRP transceiver or a receiver, I'd
> > have no
> > > problem in making a simple filter. I'm just wondering if anyone has
> > > tips on constructing a high-current filter like this. The goal is to
> > > make something that blocks noise from power supply cables and the
> > > power supply itself, so I get an overall reduction of switching
> > noise
> > > in the MF/HF bands of 80 dB or more.
> > >
> > > Ed AE7TE
> > >
> > >
> >

> > --
> > bark less - wag more
> >
> >
> >
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> --
> bark less - wag more
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28079. germanium diodes testing 0.26 volts to 0.6 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-16 16:50:49 UTC
From: Rob
Topic: 28079 Message: 28079

When testing diodes with a simple digital meter with a diode checker function I sort of expect
to see 0.6 volts on a 1N4007 or a 1N4148

and buy germanium diodes for radio receiver circuits..... expecting something more like 0.3 volts.

The Russian diodes have stripes.... with no real pattern of always being on the cathode (-)

http://www.learnmorsecode.com/regen/diodesstripes.jpg
http://www.learnmorsecode.com/regen/diodestripes2.jpg

I thought that the idea that plain silicon diodes like 1N4007 and 1N4148 were not of any use in simple crystal radio circuits because they have that 0.6 voltage drop while the historic ...in every text book crystal radio circuit.. 1N34A was supposed to be half that voltage.

I did a comparison with 8 different cat whisker germanium diodes.
I have one that is a mystery.... no markings... so I just called it BULGARIAN.
My 1N34A diodes consistently tested between 0.38 and 0.4

The BULGARIAN diodes all tested real close to 0.6

While the Russian diodes where 0.32 to 0.38

and the Russian D311 (black beauties) were 0.23

AND
just for giggles I will toss in the modern SCHOTTKY 1N5711 at 0.27

I have used the 1N5711 successfully in the bare bones simple crystal radio...big coil with slider.

http://www.learnmorsecode.com/help/alldiodes.jpg

So it looks like the D311 is the lowest and I assume it would be best for simple crystal radio RF circuits...
but I hear no difference between any of these GERMANIUM diodes....
they all receive AM broadcast radio here.

http://www.learnmorsecode.com/help/D311diode.jpg

28080. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-16 19:34:45 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28080

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Blue Grass Radio/Controlled Regenerative Receiver.asc
Uploaded by : bluegrass_radio <danieljackson@...>
Description : LTSpice analysis model of the Controlled Regenerative Receiver.

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Blue%20Grass%20Radio/Controlled%20Regenerative%20Receiver.asc

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

bluegrass_radio <danieljackson@...>

28081. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-16 19:35:26 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28081

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Blue Grass Radio/agc.asc
Uploaded by : bluegrass_radio <danieljackson@...>
Description : LTSpice "Automatic Gain Circuit" used in the Controlled Regenerative
Receiver.

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Blue%20Grass%20Radio/agc.asc

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

bluegrass_radio <danieljackson@...>

28082. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-16 19:33:31 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28082

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Blue Grass Radio/Controlled-Regenerative-Receiver.png
Uploaded by : bluegrass_radio <danieljackson@...>
Description : Schematic diagram of Controlled Regenerative Receiver seen in the LTSpice analysis model.

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Blue%20Grass%20Radio/Controlled-Regenerative-Receiver.png

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

bluegrass_radio <danieljackson@...>

28083. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-16 19:38:10 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28083

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Blue Grass Radio/Controlled Regeneration Receiver
Uploaded by : bluegrass_radio <danieljackson@...>
Description : Explanation Of LTSpice model.

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Blue%20Grass%20Radio/Controlled%20Regeneration%20Receiver

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

bluegrass_radio <danieljackson@...>

28084. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-16 19:40:04 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28084

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Blue Grass Radio/Automatic Gain Circuit Simultion
Uploaded by : bluegrass_radio <danieljackson@...>
Description : Explanation of LTSpice AGC model.

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Blue%20Grass%20Radio/Automatic%20Gain%20
Circuit%20Simultion

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

bluegrass_radio <danieljackson@...>

28085. RE: [regenrx] germanium diodes testing 0.26 volts to 0.6 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-16 20:11:40 UTC
From: Hubert Miller
Topic: 28079 Message: 28085

Maybe what you're hearing versus the different low-voltage diodes is due to your output impedance, the headphones. If the headphones are much lower impedance
than the input circuit, the small difference between diodes will not matter much. In a circuit with available gain, not a crystal radio, I don't think this small difference will be even noticeable.
I have not played with crystal set circuits for years, but as I recall, even a small difference between Ge diodes was worth checking out. When you're listening to a station at the absolute low margin of understandability, even a very slight improvement in diode operation is noticeably worthwhile. And I ALWAYS use piezo earpieces or phones
as I find those with their very high dc AND ac resistance to perform much better than mag phones even with a transformer.
Looks like I need to acquire some D311 for my next round of experimenting.

I tried out an idea for a homemade variable cap for a hillbilly crystal radio. I took two beverage cans of the narrower kind. One I cut both end caps out of, leaving me a cylinder. Then I cut it lengthwise so it could slip like a cuff over the other can. You slip it over the other can and then use a couple tabs of tape over the split in the outer can, the "cuff", to hold it together snugly over the central, uncut can. This cuff then slides over the intact can. I didn't yet devise a way to apply contacts to the cans but I think very small screws and light wire will do. My effort so far was only 'proof of concept'. For the sliding "cuff" I found a semicircle of Styrofoam at a crafts store, very light, that I can glue to the end of the 'cuff' part to minimize hand capacitance effect.
-Hue

>When testing diodes with a simple digital meter with a diode checker function I sort of expect
to see 0.6 volts on a 1N4007 or a 1N4148

and buy germanium diodes for radio receiver circuits..... expecting something more like 0.3 volts.

The Russian diodes have stripes.... with no real pattern of always being on the cathode (-)

http://www.learnmorsecode.com/regen/diodesstripes.jpg
http://www.learnmorsecode.com/regen/diodestripes2.jpg

I thought that the idea that plain silicon diodes like 1N4007 and 1N4148 were not of any use in simple crystal radio circuits because they have that 0.6 voltage drop while the historic ...in every text book crystal radio circuit.. 1N34A was supposed to be half that voltage.

I did a comparison with 8 different cat whisker germanium diodes.
I have one that is a mystery.... no markings... so I just called it BULGARIAN.
My 1N34A diodes consistently tested between 0.38 and 0.4

The BULGARIAN diodes all tested real close to 0.6

While the Russian diodes where 0.32 to 0.38

and the Russian D311 (black beauties) were 0.23

AND
just for giggles I will toss in the modern SCHOTTKY 1N5711 at 0.27

I have used the 1N5711 successfully in the bare bones simple crystal radio...big coil with slider.

http://www.learnmorsecode.com/help/alldiodes.jpg

So it looks like the D311 is the lowest and I assume it would be best for simple crystal radio RF circuits...
but I hear no difference between any of these GERMANIUM diodes.... they all receive AM broadcast radio here.

http://www.learnmorsecode.com/help/D311diode.jpg

28086. RE: [regenrx] germanium diodes testing 0.26 volts to 0.6 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-16 22:27:12 UTC
From: Hubert Miller
Topic: 28079 Message: 28086

Neat photos, thanks. I don't quite understand and couldn't see how the crystal is held, but I'll think about this and maybe look for the part. I do have a hunk of raw galena to put to use.
One of my earlier "slide capacitors" measured 700 pF max.
This gave me a silly idea to make a longer "trombone" or "slide capacitor" and at max capacity, charge it with some yet to be decided voltage, then quickly pull it to its minimum capacity position and have it flash a neon or fluorescent lamp. Q=CE.
-Hue

>Hue,
Here is another idea for a tuning capacitor made from household materials - a cake pan cut in half. One half nests inside the other. It turned out to be 180pF. For a detector I used a chunk of raw iron pyrite held in a kitchen cabinet door catch with a curtain hook for a cat's whisker. Works great for local AM stations as most xtal sets do. Mike, W6MAB888

28087. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-16 22:39:50 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28087

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Blue Grass Radio/MFJ.png
Uploaded by : bluegrass_radio <danieljackson@...>
Description : Original MFJ regenerative receiver circuit diagram.

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Blue%20Grass%20Radio/MFJ.png

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

bluegrass_radio <danieljackson@...>

28088. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-16 22:41:52 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28088

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Blue Grass Radio/MFJ-based-regenerative-receiver.png
Uploaded by : bluegrass_radio <danieljackson@...>
Description : Circuit diagram to go with LTSpice MFJ-based-regenerative-receiver.asc

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Blue%20Grass%20Radio/MFJ-based-regenerative-receiver.png

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

bluegrass_radio <danieljackson@...>

28089. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-16 22:42:50 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28089

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Blue Grass Radio/MFJ-based-regenerative-receiver.asc
Uploaded by : bluegrass_radio <danieljackson@...>
Description : LTSpice of MFJ based regenerative receiver circuit, this is a modified
version of the design.

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Blue%20Grass%20Radio/MFJ-based-regenerat
ive-receiver.asc

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

bluegrass_radio <danieljackson@...>

28090. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-16 22:46:11 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28090

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Blue Grass Radio/Based Upon The MFJ-8100
Uploaded by : bluegrass_radio <danieljackson@...>
Description : Explanation of the LTSpice model MFJ-based-regenerative-receiver.asc

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Blue%20Grass%20Radio/Based%20Upon%20The%20MFJ-8100%20

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

bluegrass_radio <danieljackson@...>

28091. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-17 00:54:43 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28091

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Blue Grass Radio/Version-2-MFJ-based-regenerative-receiver.asc
Uploaded by : bluegrass_radio <danieljackson@...>
Description : This version of the MFJ based circuit has an audio filter and AGC circuit based on the Controlled Regenerative Receiver.

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Blue%20Grass%20Radio/Version-2-MFJ-based-regenerative-receiver.asc

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

bluegrass_radio <danieljackson@...>

28092. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-17 00:58:28 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28092

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Blue Grass Radio/Special Note About Simulations
Uploaded by : bluegrass_radio <danieljackson@...>
Description : Helpful insights.

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Blue%20Grass%20Radio/Special%20Note%20About%20Simulations

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

bluegrass_radio <danieljackson@...>

28093. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-17 00:59:35 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28093

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Blue Grass Radio/Op-Amp-audio-low-pass-filter.asc
Uploaded by : bluegrass_radio <danieljackson@...>
Description : Simulation of the Op Amp audio filter used in these circuits in this folder.

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Blue%20Grass%20Radio/Op-Amp-audio-low-pass-filter.asc

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

bluegrass_radio <danieljackson@...>

28094. Re: germanium diodes testing 0.26 volts to 0.6 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-17 01:13:57 UTC
From: Paul Ross
Topic: 28079 Message: 28094

The classic approach to this is to add a little forward bias to the diode. I have a bias control on my crystal radio so that I can set the bias for optimum operation.

73 /Paul W3FIS

Sent from my iPad

28095. Re: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-17 01:31:52 UTC
From: Prof. Arnaldo Coro Antich
Topic: 28079 Message: 28095

Have any of you tried a voltage doubler diodes detector ? Have you
heard about the VOLTAGE QUADRUPLER detector published by the GQRP Club
SPRAT magazine ?

73 and DX

Arnie Coro

CO2KK

On 16/05/17 21:13, Paul Ross deadgoose@... [regenrx] wrote:
> The classic approach to this is to add a little forward bias to the diode. I have a bias control on my crystal radio so that I can set the bias for optimum operation.
>
> 73 /Paul W3FIS
>
> Sent from my iPad
>
>
> ------------------------------------
> Posted by: Paul Ross <deadgoose@...>
> ------------------------------------
>
> "In the interest of Regenerating radio's lost art of Regeneration"
> ------------------------------------
>
> Yahoo Groups Links
>
>
>
>

28096. Re: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-17 01:46:38 UTC
From: Tom Lee
Topic: 28079 Message: 28096

Voltage-multiplying detectors sound attractive on paper, but in the end,
they are just impedance transformers (and poor ones at that). In most
cases, far better results would be obtained by preceding a single
detector by a good impedance matching network instead.

--Cheers,
Tom

--
Prof. Thomas H. Lee
Allen Bldg., CIS-205
420 Via Palou Mall
Stanford University
Stanford, CA 94305-4070
http://www-smirc.stanford.edu
650-725-3383 (public fax; no confidential information, please)

On 5/16/2017 6:31 PM, 'Prof. Arnaldo Coro Antich' coro@... [regenrx]
wrote:
> Have any of you tried a voltage doubler diodes detector ? Have you
> heard about the VOLTAGE QUADRUPLER detector published by the GQRP Club
> SPRAT magazine ?
>
> 73 and DX
>
> Arnie Coro
>
> CO2KK
>
>
> On 16/05/17 21:13, Paul Ross deadgoose@... [regenrx] wrote:
>> The classic approach to this is to add a little forward bias to the diode. I have a bias
control on my crystal radio so that I can set the bias for optimum operation.
>>
>> 73 /Paul W3FIS
>>
>> Sent from my iPad
>>
>>
>> ------------------------------------
>> Posted by: Paul Ross <deadgoose@...>
>> ------------------------------------
>>
>> "In the interest of Regenerating radio's lost art of Regeneration"
>> ------------------------------------
>>

>> Yahoo Groups Links
>>
>>
>>
>>
>
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> ------------------------------------
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>
> "In the interest of Regenerating radio's lost art of Regeneration"
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28097. RE: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-17 01:51:06 UTC
From: Hubert Miller
Topic: 28079 Message: 28097

This is ALL I have every used for crystal radios since the 1960s. However I find you must use very high impedance headphones with it, and I mean impedance with
a high DC resistance component also. I mean piezo phones, the little single units or Brush (company) headphones from the past.
I have tried a fullwave 4-diode bridge. This is not worthwhile because the back capacitance of the nonconducting diodes seems to load the tuned circuit, with
consequent degrading of selectivity.
I have not tried a voltage quadrupler, but my guess is, it is not workable. The fullwave voltage doubler simply makes use of both half cycles. You can't get more
energy from the circuit than is there. I have seen published circuits showing a 2-diode fullwave detector with either a tapped single coil or 2 tuned circuits and
I'd guess the results are like the fullwave voltage doubler, the tapped coil is more complicated, but this does allow a better match, maybe, to a load with less than
very high impedance.
At one time, 1970s, I tried a voltage doubler using two high-beta Ge transistors with the bases driven from coupling coils of opposite phase from the collector
current. That seemed to have promise and from time to time I think about trying that again, but so far not. I think it's real interesting working with extremely
low current circuits. One of my old original transistor projects book has an oscillator circuit, I don't remember the exact numbers but at audio freqs I think the
thing generated an audio signal down to something like 8 uA current. I suppose this is kind of a silly pursuit, like seeing how low a plate voltage you can use and
still maintain oscillation.
-Hue

-----Original Message-----
From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Tuesday, May 16, 2017 6:32 PM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

Have any of you tried a voltage doubler diodes detector ? Have you heard about the VOLTAGE QUADRUPLER detector published by the GQRP Club SPRAT magazine ?

73 and DX

Arnie Coro

CO2KK

On 16/05/17 21:13, Paul Ross deadgoose@... [regenrx] wrote:
> The classic approach to this is to add a little forward bias to the diode. I have a bias control on my crystal radio so that I can set the bias for optimum operation.
>
> 73 /Paul W3FIS
>

> Sent from my iPad
>
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> ------------------------------------
> Posted by: Paul Ross <deadgoose@...>
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28098. VOLTAGE QUADRUPLER detector unicorn

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-17 02:16:59 UTC
From: Rob
Topic: 28079 Message: 28098

Hi Arnie,
this VOLTAGE QUADRUPLER detector published by the GQRP Club
SPRAT magazine .... is a unicorn????
I can't find it.

Could somebody PLEASE post a JPG picture of this circuit?

On 05/16/2017 09:31 PM, 'Prof. Arnaldo Coro Antich' coro@...
[regenrx] wrote:
> Have any of you tried a voltage doubler diodes detector ? Have you
> heard about the VOLTAGE QUADRUPLER detector published by the GQRP Club
> SPRAT magazine ?
>
> 73 and DX
>
> Arnie Coro
>
> CO2KK
>
>
> On 16/05/17 21:13, Paul Ross deadgoose@... [regenrx] wrote:
>> The classic approach to this is to add a little forward bias to the diode. I have a bias control on my crystal radio so that I can set the bias for optimum operation.
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>> 73 /Paul W3FIS
>>
>> Sent from my iPad
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>> ------------------------------------
>> Posted by: Paul Ross <deadgoose@...>
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28099. how to replace high impedance headphones with an LM386 circuit

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-17 02:32:52 UTC
From: Rob
Topic: 28079 Message: 28099

Can anyone recommend a minimalist speaker driver circuit to replace high impedance headphones
to demonstrate a crystal radio with room filling audio?

On 05/16/2017 09:51 PM, Hubert Miller kargo_cult@... [regenrx] wrote:
>
> This is ALL I have every used for crystal radios since the 1960s.
> However I find you must use very high impedance headphones with it,
> and I mean impedance with
> a high DC resistance component also. I mean piezo phones, the little
> single units or Brush (company) headphones from the past.
> I have tried a fullwave 4-diode bridge. This is not worthwhile because
> the back capacitance of the nonconducting diodes seems to load the
> tuned circuit, with
> consequent degrading of selectivity.
> I have not tried a voltage quadrupler, but my guess is, it is not
> workable. The fullwave voltage doubler simply makes use of both half
> cycles. You can't get more
> energy from the circuit than is there. I have seen published circuits
> showing a 2-diode fullwave detector with either a tapped single coil
> or 2 tuned circuits and
> I'd guess the results are like the fullwave voltage doubler, the
> tapped coil is more complicated, but this does allow a better match,
> maybe, to a load with less than
> very high impedance.
> At one time, 1970s, I tried a voltage doubler using two high-beta Ge
> transistors with the bases driven from coupling coils of opposite
> phase from the collector
> current. That seemed to have promise and from time to time I think
> about trying that again, but so far not. I think it's real interesting
> working with extremely
> low current circuits. One of my old original transistor projects book
> has an oscillator circuit, I don't remember the exact numbers but at
> audio freqs I think the
> thing generated an audio signal down to something like 8 uA current. I
> suppose this is kind of a silly pursuit, like seeing how low a plate
> voltage you can use and
> still maintain oscillation.
> -Hue
>
> -----Original Message-----
> From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
> Sent: Tuesday, May 16, 2017 6:32 PM
> To: regenrx@yahoogroups.com
> Subject: Re: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6

> volts
>
> Have any of you tried a voltage doubler diodes detector ? Have you
> heard about the VOLTAGE QUADRUPLER detector published by the GQRP Club
> SPRAT magazine ?
>
> 73 and DX
>
> Arnie Coro
>
> CO2KK
>
> On 16/05/17 21:13, Paul Ross deadgoose@... [regenrx] wrote:
> > The classic approach to this is to add a little forward bias to the
> diode. I have a bias control on my crystal radio so that I can set the
> bias for optimum operation.
> >
> > 73 /Paul W3FIS
> >
> > Sent from my iPad
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> >
> > ------------------------------------
> > Posted by: Paul Ross <deadgoose@...>
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28100. Re: how to replace high impedance headphones with an LM386 circuit

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-17 02:45:19 UTC
From: wb8yyy@...
Topic: 28079 Message: 28100

Rob

Nearly any example should work. google your way to WBR regen receiver, there is a ham in Norway that has a schematic with a npn preamp. Email me diect if you cant find it.

Curt

28101. Re: [regenrx] Re: how to replace high impedance headphones with an LM386 circuit

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-17 03:09:08 UTC
From: Rob
Topic: 28079 Message: 28101

Is this what you mean?

http://www.learnmorsecode.com/regen2/WBRaudio.jpg

On 05/16/2017 10:45 PM, wb8yyy@... [regenrx] wrote:
>
> Rob
>
> Nearly any example should work. google your way to WBR regen
> receiver, there is a ham in Norway that has a schematic with a npn
> preamp. Email me diect if you cant find it.
>
> Curt
>
>

28102. Re: [regenrx] Re: how to replace high impedance headphones with an LM386 circuit

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-17 03:03:59 UTC
From: Jordan Dobrikin
Topic: 28079 Message: 28102

Hi
Use an amplified Computer Speaker Set. It's input impedance high just what the Crystal Detector is looking for
73 de Jordan ve7jjd

Hi

Thanx
73 de Jordan ve7jjd

On Tue, May 16, 2017 at 7:45 PM, wb8yyy@... [regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> Rob
>
> Nearly any example should work. google your way to WBR regen receiver,
> there is a ham in Norway that has a schematic with a npn preamp. Email me
> diect if you cant find it.
>
> Curt
>
>

28103. Re: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-17 04:18:24 UTC
From: Lee
Topic: 28079 Message: 28103

According to Ben Tongue, doublers are of no value in crystal sets.
(There is no better authority on this stuff then Ben from the Blonder
Tongue Corporation family)

Check out this web site for real scoop on crystal set diodes.
http://baec.tripod.com/articles/crystal.htm

Lee, w0vt

On 5/16/2017 8:31 PM, 'Prof. Arnaldo Coro Antich' coro@... [regenrx]
wrote:
> Have any of you tried a voltage doubler diodes detector ? Have you
> heard about the VOLTAGE QUADRUPLER detector published by the GQRP Club
> SPRAT magazine ?
>
> 73 and DX
>
> Arnie Coro
>
> CO2KK
>
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> On 16/05/17 21:13, Paul Ross deadgoose@... [regenrx] wrote:
>> The classic approach to this is to add a little forward bias to the diode. I have a bias
control on my crystal radio so that I can set the bias for optimum operation.
>>
>> 73 /Paul W3FIS
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>> Sent from my iPad
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>> ------------------------------------
>> Posted by: Paul Ross <deadgoose@...>
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>> "In the interest of Regenerating radio's lost art of Regeneration"
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28104. RE: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-17 04:29:04 UTC
From: Hubert Miller
Topic: 28079 Message: 28104

Lee, instead of quoting Mr. Tongue saying the circuit is of no value, why not try this:
Lash up a simple crystal circuit: tuned circuit, diode, piezo earphone, with filter cap and/or resistor as you like.
Then convert it to a fullwave voltage doubler.
Note the difference in reception of the weakest signal you can make out, at the very margin of understandability.
Then report your results back here.
-Hue

-----Original Message-----
From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Tuesday, May 16, 2017 9:18 PM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

According to Ben Tongue, doublers are of no value in crystal sets.
(There is no better authority on this stuff then Ben from the Blonder Tongue Corporation family)

Check out this web site for real scoop on crystal set diodes.
http://baec.tripod.com/articles/crystal.htm

Lee, w0vt

28105. Re: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-17 04:47:18 UTC
From: Alvin Schmitt
Topic: 28079 Message: 28105

what happen to the people that use to be on here? Alvin P. Schmitt

APSATRON LLC
P.O. Box 201Newport VA 24128-0201

1-888-730-6478
http://www.apsministries.org/

On Wednesday, May 17, 2017 12:23 AM, "Lee l@... [regenrx]" <regenrx@yahoogroups.com> wrote:

According to Ben Tongue, doublers are of no value in crystal sets.
(There is no better authority on this stuff then Ben from the Blonder Tongue Corporation family)

Check out this web site for real scoop on crystal set diodes.
http://baec.tripod.com/articles/crystal.htm

Lee, w0vt

On 5/16/2017 8:31 PM, 'Prof. Arnaldo Coro Antich' coro@... [regenrx] wrote:
> Have any of you tried a voltage doubler diodes detector ? Have you
> heard about the VOLTAGE QUADRUPLER detector published by the GQRP Club
> SPRAT magazine ?
>
> 73 and DX
>
> Arnie Coro
>
> CO2KK
>
>
> On 16/05/17 21:13, Paul Ross deadgoose@... [regenrx] wrote:
>> The classic approach to this is to add a little forward bias to the diode. I have a bias control on my crystal radio so that I can set the bias for optimum operation.
>>
>> 73 /Paul W3FIS
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>> Posted by: Paul Ross <deadgoose@...>
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"In the interest of Regenerating radio's lost art of Regeneration"

Yahoo Groups Links

28106. Re: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-17 05:02:42 UTC
From: Tom Lee
Topic: 28079 Message: 28106

Mr. Tongue is /absolutely correct/, and I have already given the reason. I'll explain it again with a bit more color.

A voltage doubler doesn't magically create energy, so if an increase in voltage is obtained (and this is by no means guaranteed), it must come at the expense of a decrease in current because there is no source of additional energy beyond what is in the received signal. An increase in V, accompanied by a decrease in I, implies an impedance increase. That's all.

For every source impedance, there is one (and only one) load impedance into which power delivery is maximized. That impedance is the complex conjugate of the source. That means equal resistances, and reactances that are algebraic inverses. By definition, if you already have matched impedances, you are doing the best that one can do, so adding a voltage doubler in that case can only worsen things. It's only in the case where your source impedance is too low that an upward impedance transformation, such as that possibly provided by a doubler, might improve things. If a doubler helps, it's a definite sign that the original configuration was very far from optimally designed. Far better performance would be obtained by throwing away the doubler, and providing a proper match.

It's important to understand that a diode is a very inefficient impedance transformation element, and it gets more so as signal power drops. If you are seeking to improve performance, the best approach is to use an actual impedance matching network, rather than a diode-based circuit that provides an impedance transformation as an inefficient side effect. Low-loss matching will always outperform voltage "doublers".

--Tom

--
Prof. Thomas H. Lee
Allen Bldg., CIS-205
420 Via Palou Mall
Stanford University
Stanford, CA 94305-4070
http://www-smirc.stanford.edu
650-725-3383 (public fax; no confidential information, please)

On 5/16/2017 9:29 PM, Hubert Miller kargo_cult@... [regenrx] wrote:
>
> Lee, instead of quoting Mr. Tongue saying the circuit is of no value,
> why not try this:
> Lash up a simple crystal circuit: tuned circuit, diode, piezo

> earphone, with filter cap and/or resistor as you like.
> Then convert it to a fullwave voltage doubler.
> Note the difference in reception of the weakest signal you can make
> out, at the very margin of understandability.
> Then report your results back here.
> -Hue
>
> -----Original Message-----
> From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
> Sent: Tuesday, May 16, 2017 9:18 PM
> To: regenrx@yahoogroups.com
> Subject: Re: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6
> volts
>
> According to Ben Tongue, doublers are of no value in crystal sets.
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> Tongue Corporation family)
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> Check out this web site for real scoop on crystal set diodes.
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> Lee, w0vt
>
>

28107. Re: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-17 05:16:01 UTC
From: Rob
Topic: 28079 Message: 28107

I'm not going to pretend I know how all this works.....
but I did go down that path.... and heard Japan with two diodes.
pictures here:
http://www.learnmorsecode.com/help/xtal1.html

On 05/17/2017 01:02 AM, Tom Lee tomlee@... [regenrx] wrote:
>
> Mr. Tongue is /absolutely correct/, and I have already given the
> reason. I'll explain it again with a bit more color.
>
> A voltage doubler doesn't magically create energy, so if an increase
> in voltage is obtained (and this is by no means guaranteed), it must
> come at the expense of a decrease in current because there is no
> source of additional energy beyond what is in the received signal. An
> increase in V, accompanied by a decrease in I, implies an impedance
> increase. That's all.
>
> For every source impedance, there is one (and only one) load impedance
> into which power delivery is maximized. That impedance is the complex
> conjugate of the source. That means equal resistances, and reactances
> that are algebraic inverses. By definition, if you already have
> matched impedances, you are doing the best that one can do, so adding
> a voltage doubler in that case can only worsen things. It's only in
> the case where your source impedance is too low that an upward
> impedance transformation, such as that possibly provided by a doubler,
> might improve things. If a doubler helps, it's a definite sign that
> the original configuration was very far from optimally designed. Far
> better performance would be obtained by throwing away the doubler, and
> providing a proper match.
>
> It's important to understand that a diode is a very inefficient
> impedance transformation element, and it gets more so as signal power
> drops. If you are seeking to improve performance, the best approach is
> to use an actual impedance matching network, rather than a diode-based
> circuit that provides an impedance transformation as an inefficient
> side effect. Low-loss matching will always outperform voltage "doublers".
>
> --Tom
>
> --
> Prof. Thomas H. Lee
> Allen Bldg., CIS-205
> 420 Via Palou Mall
> Stanford University
> Stanford, CA 94305-4070

> http://www-smirc.stanford.edu
> 650-725-3383 (public fax; no confidential information, please)
> On 5/16/2017 9:29 PM, Hubert Miller kargo_cult@... [regenrx] wrote:
>>
>> Lee, instead of quoting Mr. Tongue saying the circuit is of no value,
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>> Lash up a simple crystal circuit: tuned circuit, diode, piezo
>> earphone, with filter cap and/or resistor as you like.
>> Then convert it to a fullwave voltage doubler.
>> Note the difference in reception of the weakest signal you can make
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>> Then report your results back here.
>> -Hue
>>
>> -----Original Message-----
>> From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
>> Sent: Tuesday, May 16, 2017 9:18 PM
>> To: regenrx@yahoogroups.com
>> Subject: Re: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6
>> volts
>>
>> According to Ben Tongue, doublers are of no value in crystal sets.
>> (There is no better authority on this stuff then Ben from the Blonder
>> Tongue Corporation family)
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>> Check out this web site for real scoop on crystal set diodes.
>> http://baec.tripod.com/articles/crystal.htm
>>
>> Lee, w0vt
>>
>
>

28108. Re: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-17 05:33:07 UTC
From: Lee
Topic: 28079 Message: 28108

Tom,

Thanks for explaining this to the group. The bottom line as you mention is, "There is no free lunch." I have a good friend really into crystal sets. I mean really into them. He is also an electrical engineer. He will spend $1000 building one. He is a serious crystal set guy. He has logged in way over 150 stations with his sets. What is important to him is: 1. Sound powered headphones, 2. matched antenna impedance and audio impedance to headset (Audio Impedance transformer), 3. use of a hand picked holly grail diode, 4. 660/40 Litz wire coils air wound, 5. Selectivity links, 6. Ceramic insulated silver plated variable capacitors with excellent grounding tabs, 7. All parts mounted with ceramic standoff insulators, 8. Gear reduction tuning capacitor drives. Plus a good antenna. I've had the privilege of listening to one of them. All I can say is WOW! I never knew a crystal set could perform like this.

Lee, w0vt

On 5/17/2017 12:02 AM, Tom Lee tomlee@... [regenrx] wrote:
>
> Mr. Tongue is /absolutely correct/, and I have already given the
> reason. I'll explain it again with a bit more color.
>
> A voltage doubler doesn't magically create energy, so if an increase
> in voltage is obtained (and this is by no means guaranteed), it must
> come at the expense of a decrease in current because there is no
> source of additional energy beyond what is in the received signal. An
> increase in V, accompanied by a decrease in I, implies an impedance
> increase. That's all.
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> For every source impedance, there is one (and only one) load impedance
> into which power delivery is maximized. That impedance is the complex
> conjugate of the source. That means equal resistances, and reactances
> that are algebraic inverses. By definition, if you already have
> matched impedances, you are doing the best that one can do, so adding
> a voltage doubler in that case can only worsen things. It's only in
> the case where your source impedance is too low that an upward
> impedance transformation, such as that possibly provided by a doubler,
> might improve things. If a doubler helps, it's a definite sign that
> the original configuration was very far from optimally designed. Far
> better performance would be obtained by throwing away the doubler, and
> providing a proper match.
>
> It's important to understand that a diode is a very inefficient
> impedance transformation element, and it gets more so as signal power

> drops. If you are seeking to improve performance, the best approach is
> to use an actual impedance matching network, rather than a diode-based
> circuit that provides an impedance transformation as an inefficient
> side effect. Low-loss matching will always outperform voltage "doublers".
>
> --Tom
>
> --
> Prof. Thomas H. Lee
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>>
>> Lee, instead of quoting Mr. Tongue saying the circuit is of no value,
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>> earphone, with filter cap and/or resistor as you like.
>> Then convert it to a fullwave voltage doubler.
>> Note the difference in reception of the weakest signal you can make
>> out, at the very margin of understandability.
>> Then report your results back here.
>> -Hue
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>> -----Original Message-----
>> From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
>> Sent: Tuesday, May 16, 2017 9:18 PM
>> To: regenrx@yahoogroups.com
>> Subject: Re: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6
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>> According to Ben Tongue, doublers are of no value in crystal sets.
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>> Check out this web site for real scoop on crystal set diodes.
>> http://baec.tripod.com/articles/crystal.htm
>>
>> Lee, w0vt
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>

28109. RE: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-17 06:03:35 UTC
From: Hubert Miller
Topic: 28079 Message: 28109

I believe the DX logs of high-end crystal radios is mostly attributable to the improved selectivity of high-end designs. In the old days, using even super basic crystal radios, considered inefficient toys now, people were hearing stations 1000 miles away - this was when there were fewer stations on the air to jam your DX station. The old shipboard crystal receivers used to get 1500+ miles distance.
That 660 Litz from China amazes me. I can't see that there's an industrial purchaser for this high-end product and I guess it's a "boutique product" to satisfy a particular narrow market willing to pay boutique specialty prices.

One thing about matching impedance that really surprised me, when I was experimenting with crystal circuits: I found that I could still hear a local or two with the headphones 32 ohms type. That is one substantial mismatch; you'd almost think, this should not work! I suppose it's the sensitivity of hearing plus the good level of the local signal put it into the ear's low end hearing range.
I think I concluded after trying a few audio matching transformers, yes, an impedance match is important, but not as all-important as you think, and the power output delivered does not fall off as rapidly as you'd think. In other words, nor is a perfect impedance match a free lunch.
-Hue

28110. RE: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-17 05:47:38 UTC
From: Hubert Miller
Topic: 28079 Message: 28110

Because of the performance of the diode, you want to operate it at as high a voltage as possible for the input power - so this means, yes, high impedances in and out of the diode. The highest input, diode driving impedance we can get is the parallel tuned circuit with low - C. Then if you have a very high impedance load, around 100k with some piezo phones, you do have a mismatch, but not a gross mismatch as the usual old-time circuit with something like 2k - 14k ohm magnetic headphone. This is the circuit, a very basic circuit, I am talking about. If you add one diode and a 1 nF cap to this circuit, you have a fullwave voltage doubler and you absolutely will notice the increased output.
I am NOT talking about a magnetic headphone passive receiver with a high-low matching audio transformer. I am not talking about a free lunch or magic energy. It's just a simple kink to improve the most basic crystal set circuit with just a couple parts, to derive power from the other half of the RF cycle. Some different considerations apply to the case where the output device (headphones) are very high impedance. In this case, you do not even need a DC circuit after the diode - you can even have a capacitor in series, the "floating diode"
circuit that some people say "can not work." This is a simple real-life experiment with real-life off-the-shelf parts. If you disagree, and I show you the parts you have to work with,
how do you arrange them for a better impedance match?
-Hue I

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Tuesday, May 16, 2017 10:03 PM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

Mr. Tongue is absolutely correct, and I have already given the reason. I'll explain it again with a bit more color.

A voltage doubler doesn't magically create energy, so if an increase in voltage is obtained (and this is by no means guaranteed), it must come at the expense of a decrease in current because there is no source of additional energy beyond what is in the received signal. An increase in V, accompanied by a decrease in I, implies an impedance increase. That's all.

For every source impedance, there is one (and only one) load impedance into which power delivery is maximized. That impedance is the complex conjugate of the source. That means equal resistances, and reactances that are algebraic inverses. By definition, if you already have matched impedances, you are doing the best that one can do, so adding a voltage doubler in that case can only worsen things. It's only in the case where your source impedance is too low that an upward impedance transformation, such as that possibly provided by a doubler, might improve things. If a doubler helps, it's a definite sign that the original configuration was very far from optimally designed. Far better performance would be obtained by throwing away the doubler, and providing a proper match.

It's important to understand that a diode is a very inefficient impedance transformation element, and it gets more so as signal power drops. If you are seeking to improve performance, the best approach is to use an actual impedance matching network, rather than a diode-based circuit that provides an impedance transformation as an inefficient side effect. Low-loss matching will always outperform voltage "doublers".

--Tom

28111. Re: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-17 06:10:42 UTC
From: Tom Lee
Topic: 28079 Message: 28111

Hi Lee,

It sounds like your friend has built the ultimate crystal radio! I've done less than half of those things (sound-powered phones are miraculous for xtal sets), but it's always been on my to-do list to go further. It really is amazing how much performance one can squeeze out of a completely passive receiver. Of course, we must also give the human auditory system its due -- our ears can detect signals so feeble that they displace the eardrum by less than the diameter of the hydrogen atom!

--Cheers,
Tom

--
Prof. Thomas H. Lee
Allen Bldg., CIS-205
420 Via Palou Mall
Stanford University
Stanford, CA 94305-4070
http://www-smirc.stanford.edu
650-725-3383 (public fax; no confidential information, please)

On 5/16/2017 10:33 PM, Lee l@... [regenrx] wrote:
>
> Tom,
>
> Thanks for explaining this to the group. The bottom line as you
> mention is, "There is no free lunch." I have a good friend really
> into crystal sets. I mean really into them. He is also an electrical
> engineer. He will spend $1000 building one. He is a serious crystal
> set guy. He has logged in way over 150 stations with his sets. What
> is important to him is: 1. Sound powered headphones, 2. matched
> antenna impedance and audio impedance to headset (Audio Impedance
> transformer), 3. use of a hand picked holly grail diode, 4. 660/40
> Litz wire coils air wound, 5. Selectivity links, 6. Ceramic
> insulated silver plated variable capacitors with excellent grounding
> tabs, 7. All parts mounted with ceramic standoff insulators, 8. Gear
> reduction tuning capacitor drives. Plus a good antenna. I've had the
> privilege of listening to one of them. All I can say is WOW! I never
> knew a crystal set could perform like this.
>
> Lee, w0vt
>
>
> On 5/17/2017 12:02 AM, Tom Lee tomlee@... [regenrx] wrote:
>>

>> Mr. Tongue is /absolutely correct/, and I have already given the
>> reason. I'll explain it again with a bit more color.
>>
>> A voltage doubler doesn't magically create energy, so if an increase
>> in voltage is obtained (and this is by no means guaranteed), it must
>> come at the expense of a decrease in current because there is no
>> source of additional energy beyond what is in the received signal. An
>> increase in V, accompanied by a decrease in I, implies an impedance
>> increase. That's all.
>>
>> For every source impedance, there is one (and only one) load
>> impedance into which power delivery is maximized. That impedance is
>> the complex conjugate of the source. That means equal resistances,
>> and reactances that are algebraic inverses. By definition, if you
>> already have matched impedances, you are doing the best that one can
>> do, so adding a voltage doubler in that case can only worsen things.
>> It's only in the case where your source impedance is too low that an
>> upward impedance transformation, such as that possibly provided by a
>> doubler, might improve things. If a doubler helps, it's a definite
>> sign that the original configuration was very far from optimally
>> designed. Far better performance would be obtained by throwing away
>> the doubler, and providing a proper match.
>>
>> It's important to understand that a diode is a very inefficient
>> impedance transformation element, and it gets more so as signal power
>> drops. If you are seeking to improve performance, the best approach
>> is to use an actual impedance matching network, rather than a
>> diode-based circuit that provides an impedance transformation as an
>> inefficient side effect. Low-loss matching will always outperform
>> voltage "doublers".
>>
>> --Tom
>>
>> --
>> Prof. Thomas H. Lee
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>> 650-725-3383 (public fax; no confidential information, please)
>> On 5/16/2017 9:29 PM, Hubert Miller kargo_cult@... [regenrx] wrote:
>>>
>>> Lee, instead of quoting Mr. Tongue saying the circuit is of no
>>> value, why not try this:
>>> Lash up a simple crystal circuit: tuned circuit, diode, piezo
>>> earphone, with filter cap and/or resistor as you like.
>>> Then convert it to a fullwave voltage doubler.
>>> Note the difference in reception of the weakest signal you can make
>>> out, at the very margin of understandability.

>>> Then report your results back here.
>>> -Hue
>>>
>>> -----Original Message-----
>>> From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
>>> Sent: Tuesday, May 16, 2017 9:18 PM
>>> To: regenrx@yahoogroups.com
>>> Subject: Re: [regenrx] Re: germanium diodes testing 0.26 volts to
>>> 0.6 volts
>>>
>>> According to Ben Tongue, doublers are of no value in crystal sets.
>>> (There is no better authority on this stuff then Ben from the
>>> Blonder Tongue Corporation family)
>>>
>>> Check out this web site for real scoop on crystal set diodes.
>>> http://baec.tripod.com/articles/crystal.htm
>>>
>>> Lee, w0vt
>>>
>>
>
>

28112. Re: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-17 06:15:36 UTC
From: Tom Lee
Topic: 28079 Message: 28112

Hi Hue,

Please read what I took the trouble to write in detail.

Summary: If you notice improvement with a doubler, it's a sign that your original circuit was horribly mismatched. It is not a sign that the doubler is "good". Throw away the doubler and add impedance transformation as necessary. No extra diodes, which are terribly lossy. The receiver will perform much better than with the doubler.

You need to perform fair comparisons. Simply noting that the doubler improves performance in a limited circumstance tells you almost nothing about what is actually going on.

--Cheers,
Tom

--
Prof. Thomas H. Lee
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420 Via Palou Mall
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650-725-3383 (public fax; no confidential information, please)

On 5/16/2017 10:47 PM, Hubert Miller kargo_cult@... [regenrx] wrote:
>
> Because of the performance of the diode, you want to operate it at as
> high a voltage as possible for the input power - so this means, yes,
> high impedances in and out of the diode.
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> The highest input, diode driving impedance we can get is the parallel
> tuned circuit with low ? C. Then if you have a very high impedance
> load, around 100k with some
>
> piezo phones, you do have a mismatch, but not a gross mismatch as the
> usual old-time circuit with something like 2k ? 14k ohm magnetic
> headphone. This is the circuit,
>
> a very basic circuit, I am talking about. If you add one diode and a 1
> nF cap to this circuit, you have a fullwave voltage doubler and you
> absolutely will notice the increased output.
>
> I am NOT talking about a magnetic headphone passive receiver with a
> high-low matching audio transformer. I am not talking about a free

> lunch or magic energy. It's just a simple kink
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> to improve the most basic crystal set circuit with just a couple
> parts, to derive power from the other half of the RF cycle. Some
> different considerations apply to the case where
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> case, you do not even need a DC circuit after the diode ? you can even
> have a capacitor in series, the "floating diode"
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> circuit that some people say "can not work." This is a simple
> real-life experiment with real-life off-the-shelf parts. If you
> disagree, and I show you the parts you have to work with,
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> how do you arrange them for a better impedance match?
>
> -Hue I
>
> *From:* regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
> *Sent:* Tuesday, May 16, 2017 10:03 PM
> *To:* regenrx@yahoogroups.com
> *Subject:* Re: [regenrx] Re: germanium diodes testing 0.26 volts to
> 0.6 volts
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> Mr. Tongue is /absolutely correct/, and I have already given the
> reason. I'll explain it again with a bit more color.
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> A voltage doubler doesn't magically create energy, so if an increase
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> come at the expense of a decrease in current because there is no
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> better performance would be obtained by throwing away the doubler, and
> providing a proper match.
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> It's important to understand that a diode is a very inefficient
> impedance transformation element, and it gets more so as signal power
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> to use an actual impedance matching network, rather than a diode-based
> circuit that provides an impedance transformation as an inefficient
> side effect. Low-loss matching will always outperform voltage "doublers".
>
> --Tom
>
>

28113. Re: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-17 06:17:27 UTC
From: Lee
Topic: 28079 Message: 28113

My friend also is particular what audio impedance transformer he uses. Some are more efficient then others. I can't remember the number, but he loves one made by UTC. I think the secondary is around 1000,000 to match the sound powered headphones. (Sound powered headphones use both halves of the wave for driving the earpiece.) His whole goal is to remove as much loss as possible everywhere. The combination of all the small savings adds up to a significant improvement. When you listen to a crystal set like this you would swear you are listening to a device using many transistors and or ICs. I never thought it possible to have something like this work this well with no power supply. I am sure at $1000 to build a set like this, he is on a curve that is leveling out with ever diminishing returns.

Lee, w0vt

28114. RE: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-17 06:26:41 UTC
From: Hubert Miller
Topic: 28079 Message: 28114

Tom, given the circuit components I described, arranged in a simple crystal set, how do you achieve improved impedance matching? As I said, this is a simple kink to improve (an existing) basic set. I am not going for the ultimate in effort that Lee described, I am talking off the shelf, Radio Shack (once upon a time) parts. I'm not missing your point.

I happen to prefer Brush piezo phones, even tho others claim the soundpowered are better. When I test the piezos, I do it by just touching the leads together, or touching one lead to a key or tool or something metal, which you can hear. Also with these, you can hear the 10 kHz beat note indicating a weak signal, maybe too weak for audio.
(or at least I could hear 10 kHz, when I was younger.)
-Hue

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Tuesday, May 16, 2017 11:16 PM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

Hi Hue,

Please read what I took the trouble to write in detail.

Summary: If you notice improvement with a doubler, it's a sign that your original circuit was horribly mismatched. It is not a sign that the doubler is "good". Throw away the doubler and add impedance transformation as necessary. No extra diodes, which are terribly lossy. The receiver will perform much better than with the doubler.

You need to perform fair comparisons. Simply noting that the doubler improves performance in a limited circumstance tells you almost nothing about what is actually going on.

--Cheers,
Tom

--

Prof. Thomas H. Lee

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650-725-3383 (public fax; no confidential information, please)
On 5/16/2017 10:47 PM, Hubert Miller kargo_cult@...<mailto:kargo_cult@...> [regenrx]

wrote:

Because of the performance of the diode, you want to operate it at as high a voltage as possible for the input power - so this means, yes, high impedances in and out of the diode. The highest input, diode driving impedance we can get is the parallel tuned circuit with low - C. Then if you have a very high impedance load, around 100k with some piezo phones, you do have a mismatch, but not a gross mismatch as the usual old-time circuit with something like 2k - 14k ohm magnetic headphone. This is the circuit, a very basic circuit, I am talking about. If you add one diode and a 1 nF cap to this circuit, you have a fullwave voltage doubler and you absolutely will notice the increased output.
I am NOT talking about a magnetic headphone passive receiver with a high-low matching audio transformer. I am not talking about a free lunch or magic energy. It's just a simple kink to improve the most basic crystal set circuit with just a couple parts, to derive power from the other half of the RF cycle. Some different considerations apply to the case where the output device (headphones) are very high impedance. In this case, you do not even need a DC circuit after the diode - you can even have a capacitor in series, the "floating diode"
circuit that some people say "can not work." This is a simple real-life experiment with real-life off-the-shelf parts. If you disagree, and I show you the parts you have to work with,
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-Hue I

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[mailto:regenrx@yahoogroups.com]
Sent: Tuesday, May 16, 2017 10:03 PM
To: regenrx@yahoogroups.com<mailto:regenrx@yahoogroups.com>
Subject: Re: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

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For every source impedance, there is one (and only one) load impedance into which power delivery is maximized. That impedance is the complex conjugate of the source. That means equal resistances, and reactances that are algebraic inverses. By definition, if you already have matched impedances, you are doing the best that one can do, so adding a voltage doubler in that case can only worsen things. It's only in the case where your source impedance is too low that an upward impedance transformation, such as that possibly provided by a doubler, might improve things. If a doubler helps, it's a definite sign that the original configuration was very far from optimally designed. Far better performance would be obtained by throwing away the doubler, and providing a proper match.

It's important to understand that a diode is a very inefficient impedance transformation element, and it gets more so as signal power drops. If you are seeking to improve performance, the best approach is to use an actual impedance matching network, rather than a diode-based circuit that provides an impedance transformation as an inefficient side effect. Low-loss matching will always outperform voltage "doublers".

--Tom

28115. Re: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-17 06:36:15 UTC
From: Tom Lee
Topic: 28079 Message: 28115

Hi Hue,

One way to provide an impedance conversion at the input side is to connect the antenna to a tap on the tank, and then to drive your diode detector with another tap. To effect an upward transformation, the antenna connects to the tap closer to ground, and the diode connects to the tap closer to the top of the tank. If the tank has any kind of reasonable Q, it will perform the transformation with much higher efficiency than a doubler would. You will present a higher voltage to your diode detector (and deliver more to your load) than if a doubler were used.

--Cheers,
Tom

--
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http://www-smirc.stanford.edu
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On 5/16/2017 11:26 PM, Hubert Miller kargo_cult@... [regenrx] wrote:
>
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> (or at least I could hear 10 kHz, when I was younger.)
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> -Hue
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> *From:* regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]

> *Sent:* Tuesday, May 16, 2017 11:16 PM
> *To:* regenrx@yahoogroups.com
> *Subject:* Re: [regenrx] Re: germanium diodes testing 0.26 volts to
> 0.6 volts
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> -Hue I
>
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> [mailto:regenrx@yahoogroups.com]
> *Sent:* Tuesday, May 16, 2017 10:03 PM
> *To:* regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>
> *Subject:* Re: [regenrx] Re: germanium diodes testing 0.26 volts
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> --Tom
>
>

28116. RE: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-17 06:47:13 UTC
From: Hubert Miller
Topic: 28079 Message: 28116

I'm recalling now that I did some tries with audio matching transformers a couple years back. Even with the high impedance headphones, I thought
I'd try impedance transformation ratios in the 2:1 to 3:1 range to better match the input. The tuned circuit was a series resonant high-inductance
with the diode on the inductance element. I had found some carbon microphone transformers and some 400 Hz power transformers I had pulled
out of old test equipment, these had a variety of taps. I basically found, no improvement to be had. I attribute this to: still less than ideal match found
with my particular transformers, and 2, it's not that all that critical for impedance values that are "in the ballpark". I'm not totally satisfied with results
from those tests, and I'm going to have to gather a bunch of my transformers and have a rematch. I was using the various high voltage windings of the
400 Hz power transformers for the various transformer ratios. I found those power transformers were worth keeping as the inductances even just for
audio choke use, could be wired to give 35-50 H.
-Hue

28117. RE: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-17 06:50:08 UTC
From: Hubert Miller
Topic: 28079 Message: 28117

Tom, my conditions are a short, capacitive-reactive antenna. Tapping down the coil is counterproductive for this case. With the antenna and the headphone I use, tapping down either antenna
or diode tap results in diminished output (with improved selectivity as result of decreased load.) There is a good reason I maximized the inductance in the tuned circuit.

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Tuesday, May 16, 2017 11:36 PM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

Hi Hue,

One way to provide an impedance conversion at the input side is to connect the antenna to a tap on the tank, and then to drive your diode detector with another tap. To effect an upward transformation, the antenna connects to the tap closer to ground, and the diode connects to the tap closer to the top of the tank. If the tank has any kind of reasonable Q, it will perform the transformation with much higher efficiency than a doubler would. You will present a higher voltage to your diode detector (and deliver more to your load) than if a doubler were used.

--Cheers,
Tom

--

Prof. Thomas H. Lee

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420 Via Palou Mall

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650-725-3383 (public fax; no confidential information, please)
On 5/16/2017 11:26 PM, Hubert Miller kargo_cult@...<mailto:kargo_cult@...> [regenrx] wrote:

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(an existing) basic set. I am not going for the ultimate in effort that Lee described, I am talking off the shelf, Radio Shack (once upon a time) parts. I'm not missing your point.

I happen to prefer Brush piezo phones, even tho others claim the soundpowered are better.
When I test the piezos, I do it by just touching the leads together, or touching
one lead to a key or tool or something metal, which you can hear. Also with these, you can
hear the 10 kHz beat note indicating a weak signal, maybe too weak for audio.
(or at least I could hear 10 kHz, when I was younger.)
-Hue

From: regenrx@yahoogroups.com<mailto:regenrx@yahoogroups.com>
[mailto:regenrx@yahoogroups.com]
Sent: Tuesday, May 16, 2017 11:16 PM
To: regenrx@yahoogroups.com<mailto:regenrx@yahoogroups.com>
Subject: Re: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

Hi Hue,

Please read what I took the trouble to write in detail.

Summary: If you notice improvement with a doubler, it's a sign that your original circuit was horribly mismatched. It is not a sign that the doubler is "good". Throw away the doubler and add impedance transformation as necessary. No extra diodes, which are terribly lossy. The receiver will perform much better than with the doubler.

You need to perform fair comparisons. Simply noting that the doubler improves performance in a limited circumstance tells you almost nothing about what is actually going on.

--Cheers,
Tom

--

Prof. Thomas H. Lee

Allen Bldg., CIS-205

420 Via Palou Mall

Stanford University

Stanford, CA 94305-4070

http://www-smirc.stanford.edu

650-725-3383 (public fax; no confidential information, please)
On 5/16/2017 10:47 PM, Hubert Miller kargo_cult@...<mailto:kargo_cult@msn.com> [regenrx]
wrote:

Because of the performance of the diode, you want to operate it at as high a voltage as possible for the input power - so this means, yes, high impedances in and out of the diode. The highest input, diode driving impedance we can get is the parallel tuned circuit with low - C. Then if you have a very high impedance load, around 100k with some
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I am NOT talking about a magnetic headphone passive receiver with a high-low matching audio transformer. I am not talking about a free lunch or magic energy. It's just a simple kink to improve the most basic crystal set circuit with just a couple parts, to derive power from the other half of the RF cycle. Some different considerations apply to the case where the output device (headphones) are very high impedance. In this case, you do not even need a DC circuit after the diode - you can even have a capacitor in series, the "floating diode"
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It's important to understand that a diode is a very inefficient impedance transformation element, and it gets more so as signal power drops. If you are seeking to improve performance, the best approach is to use an actual impedance matching network, rather than a diode-based circuit that provides an impedance transformation as an inefficient side effect. Low-loss matching will always outperform voltage "doublers".

--Tom

28119. RE: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-17 18:50:50 UTC
From: Hubert Miller
Topic: 28079 Message: 28119

This has been my experience. I understand the use of the super-Litz wire, and I'll probably buy some, but I'm a believer in ferrite cores, as this minimizes the wire used, and that's a benefit. In my more recent very basic experiments, I used one of those N-in-one kits with the spring clips. At these frequencies tho you can just lay the parts on your table and use alligator test leads to connect everything. I used two ferrite core coils in series, selectable one or two, and I loosened the cores so I could adjust the inductance more. As my usual antennas are short, high capacitive reactive, I wanted inductance in series to resonate with this capacitance. So basically I used the series resonant input circuit, also used in the Heathkit CR-1 and the emergency crystal receiver in the WW2 Mackay ship radio console, among others. Another way to do this is with a tapped coil, to tap near the top of the coil, or as many experimenters do, just connect right to the top of the tuned circuit via another variable. Tapping down the coil only applies if you have something like a long antenna. I also found that impedance matching of course, worthwhile but do not expect a sudden peak in performance, it's not a sharply defined boost like tuned circuit resonance. I am aware the voltage doubler doesn't work and I shouldn't use it, but I say, why not lash up some simple single-tuned circuit, with some provision for antenna matching, and then add the two components and try it? It takes about a half hour at most and the readers can prove or disprove this for themselves.
I was curious last night and looked at a couple Brush piezo phones with my basic test equipment. One pair seemed to be defective, the other set measured 2M ohms DC and 700 pF. That's very preliminary and at present I don't have an audio generator so I could do a more informative test.

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Wednesday, May 17, 2017 9:30 AM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

I built two crystal sets, one with air-core coils and one with ferrite-core coils, and both based on a circuit in the "Ask Me Another" column in the Oct-Nov 1967 issue of Radio-TV Experimenter. As published, the circuit has two 1N34 diodes in a voltage doubler configuration. I also tried both sets in the traditional single diode configuration. Their were no differences in volume or selectivity with regular 2000 Ohm phones, but both volume and selectivity were improved with the voltage doubler configuration when I used my Mil Surplus 17,000 Ohm phones. I attribute this to better impedance matching and some unloading of the tuned circuit with the doubler. Also, the performance of the set with ferrite-core coils was slightly better than the one with air-core coils. Pictures of circuit and sets available as attachments to off-list email request. Uploading to yahoo is too much bother, and besides, this is off-topic for regenrx. Mike, W6MAB

28120. Re: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-17 19:45:48 UTC
From: Jim Simmons
Topic: 28079 Message: 28120

Theory is fine, but it's not the "end-all" to explain why some things
work, and other things don't work. Try a circuit and see for yourself
whether it works or not.

Way back in 1960, Popular Electronics published a voltage doubler
crystal receiver that would drive a loudspeaker. I built this crystal
set exactly as described back in 1960. This little receiver performed
very well. Although the volume wasn't room-filling, it was plenty loud
enough for night time listening. I placed the receiver on the headboard
of my bed and was lulled to sleep by music every night. I don't remember
much about the antenna, except it was a long wire end-fed (probably
about 20 or 30 feet long because the area where I lived at the time was
small. It does feature a dual-tuned input - which may explain it. I
didn't play around with it and remove one of the diodes and see if it no
longer worked. I was just happy that it served my purpose. I wish I
still had it, but I was in the Air Force back then and through many
moves during my career it was lost.

http://www.rfcafe.com/references/popular-electronics/high-power-crystal-set-august-1960-po
pular-electronics.htm

Jim, N5MSJ

On 5/17/2017 1:15 AM, Tom Lee tomlee@... [regenrx] wrote:
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> lossy. The receiver will perform much better than with the doubler.
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> improves performance in a limited circumstance tells you almost
> nothing about what is actually going on.
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> --Cheers,
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> Prof. Thomas H. Lee
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> Stanford University
> Stanford, CA 94305-4070
> http://www-smirc.stanford.edu
> 650-725-3383 (public fax; no confidential information, please)
> On 5/16/2017 10:47 PM, Hubert Miller kargo_cult@... [regenrx] wrote:
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>> *Sent:* Tuesday, May 16, 2017 10:03 PM
>> *To:* regenrx@yahoogroups.com
>> *Subject:* Re: [regenrx] Re: germanium diodes testing 0.26 volts to
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>> --Tom
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28121. Re: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-17 20:30:41 UTC
From: Tom Lee
Topic: 28079 Message: 28121

> Theory is fine, but it's not the "end-all" to explain why some things
> work, and other things don't work. Try a circuit and see for yourself
> whether it works or not.

Theory is, in fact, the end-all to explain things in electrical engineering. Experiment is of course the final arbiter of /whether or not/ something works, but the explanation of *why *it works (or doesn't) is theory. Physical intuition is helpful in inventing, but it only gets you so far. Without theory there's no way of knowing how much better your circuit could perform. Without theory, you're left only with unreliable lore, less reliable superstition, and almost wholly unreliable opinion. Some people prefer that to actual science, and that's fine, but if one is serious about understanding what they're doing, then theory it must be.

Electrical engineering is extremely well understood. It would not be possible to construct multibillion-transistor GPUs and terabit/s millimeter-wave circuits were it not so. One does not design a cell phone -- which must successfully resolve 10 femtowatt signals in contested environments -- without careful adherence to theory.

--Cheers,
Tom

--
Prof. Thomas H. Lee
Allen Bldg., CIS-205
420 Via Palou Mall
Stanford University
Stanford, CA 94305-4070
http://www-smirc.stanford.edu
650-725-3383 (public fax; no confidential information, please)

On 5/17/2017 12:45 PM, Jim Simmons orion@... [regenrx] wrote:
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> crystal receiver that would drive a loudspeaker. I built this crystal
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>> On 5/16/2017 10:47 PM, Hubert Miller kargo_cult@... [regenrx] wrote:
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>>> *Sent:* Tuesday, May 16, 2017 10:03 PM
>>> *To:* regenrx@yahoogroups.com
>>> *Subject:* Re: [regenrx] Re: germanium diodes testing 0.26 volts to
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28122. RE: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-17 20:31:36 UTC
From: Hubert Miller
Topic: 28079 Message: 28122

This circuit could use an optimized input circuit. The one-size-fits-all input coil is not the best way to maximize signal.
The most tuned circuits I used was three in cascade; this was many years ago when living north of Seattle, I wanted to pick up a 1 kW classical music
station in Seattle, KXA. Now both the format and this station are gone. The downfall of my basic crystal set is the single tuned circuit. It does a very
good job extracting maximum power from the antenna, but this loads the tuned circuit, and a second tuned circuit is really called for.
The farthest I have heard with such a simple set and makeshift antenna is about 900 miles. But it needs more selectivity because strong locals cover
too much.
I read that coil experimenters had gotten Q figures up over 1000. I would like to try that too, but that will have to wait. I do have some commercially
made ferrite core antenna coils with Q=450 and maybe this will find its way into a crystal set project.
-H

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Wednesday, May 17, 2017 12:46 PM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

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http://www.rfcafe.com/references/popular-electronics/high-power-crystal-set-august-1960-popular-electronics.htm

Jim, N5MSJ

On 5/17/2017 1:15 AM, Tom Lee tomlee@ee.stanford.edu<mailto:tomlee@...> [regenrx] wrote:

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--Tom

28123. capacitor for VFO use ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-17 20:53:42 UTC
From: Hubert Miller
Topic: 28123 Message: 28123

I want to check an assumption of mine. "Single bearing variable capacitors are not suitable for VFO use". Is this true, that these have
inherent mechanical instability that makes them unsuitable for VFO tuning, and therefore also regen receivers? If so - is a similar
level of stability quality required for such a cap used in the regen control?

I recovered 20 air variables 15-250 pF from boat radio antenna coupler I disassembled. They are in new condition and look good but
they are of the single-hole panel mounting type.
-Hue

28125. was germanium ... now crystal or regen radio

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-17 22:15:20 UTC
From: Rob
Topic: 28079 Message: 28125

I find all of the detail discussion about double diode...litz wire.....etc ... completely fascinating.
Not to dissuade any purists from building crystal radios here.....
but
my path of experimentation started with crystal radios.... simple minimalist 1N34A radios
to have kids ...scouts and newbies.... get a good induction into the hobby of electronics
and ham radio .... using the bare minimum of parts required to achieve success....to HERE the world on something they built from scratch.

http://www.learnmorsecode.com/help/xtal1.html

I moved on to the simple bare minimalist regenerative receiver because the crystal radio had very
unpredictable results...good and very bad.
http://www.learnmorsecode.com/regen/00regen.html
And ....again with the same goal..... fast path for newbies.... with dirt cheat readily available components.
The fact that this $4.00 radio hears Cuba.... 1,300 miles away from here pretty much says it all.

So when I tripped onto the germanium diode requirement for the regen I needed to find
cheaper diodes.... 5 to ten cents each..... instead of getting mugged for 1N34A prices.
Its all been very educational ... and cheap enough... to buy 1,000 Russian diodes.
I'll never buy another germanium diode again.

28127. RE: [regenrx] was germanium ... now crystal or regen radio

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-17 22:54:33 UTC
From: Hubert Miller
Topic: 28079 Message: 28127

I like the idea of "found parts" demonstrating some electrical and electronics principle. It's both silly and beautiful at the same time.
The "found" parts have the desired trash look, but, hey, they are really doing something.
For a "foxhole radio" with the blade detector, for the detector probe I used a pencil, sharpened down to a ridiculous shortness, just point and eraser.
The point was sharpened to maximum sharpness. I inserted a pin just before the eraser holder, to contact the 'carbon' core and thus the
point, to this was connected a thin wire. A stiff wire wrapped around the eraser part held the pencil and permitted adjusting its position
on the blade. It looked wonderful. Visuals, I think, are worthwhile.

It occurred to me on our homemade tuning caps, be they pie-plate or beer can style, one could trim the variable section (rotor) shape
to give a "straight line" tuning rate, via the geometry of the rotor section. Now wouldn't that be an interesting math problem?
-Hue

28128. RE: [regenrx] was germanium ... now crystal or regen radio

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-17 22:23:37 UTC
From: Hubert Miller
Topic: 28079 Message: 28128

Rob, I recall eons ago, when was a young fellow and (more) ignorant, going to a radio-TV repair shop and buying ONE diode for a crystal radio.
The price was something like $2 in 1963 ! I learned from that, how NOT to buy parts!
I started implanting the voltage doubler into existing crystal radios.

One thing kind of on my think-about list: using one of those zinc-plate homemade negative resistance devices to build a total homebrew radio
with actual gain, regeneration in fact, with distance range. My conclusion on how to control regeneration, similar to tunnel diode operation,
is that control via bias level is just too critical, and hence some absorption scheme like Don's slug-absorb circuit would be the best way to control
the regeneration. One could even build the headphone from scratch, if you want to go really gung-ho. This gizmo would really amaze your students,
when they look at the circuit board and see 100% "found" parts.
-H

28129. Re: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-17 19:24:39 UTC
From: Tom Lee
Topic: 28079 Message: 28129

Hi Hue,

I don't fully comprehend the constraints you've imposed on the problem/solution, but in the abstract, a short, capacitive antenna's impedance can be well matched by absorbing that capacitance into a tapped capacitance divider in parallel with the tank inductor.

Because the radiation resistance of a short antenna diminishes as the square of the normalized length, inattention to loss mechanisms can easily result in the radiation resistance becoming irrelevant. But if one is seeking the best performance, assiduous attention to minimizing loss is essential.

--Cheers,
Tom

--
Prof. Thomas H. Lee
Allen Bldg., CIS-205
420 Via Palou Mall
Stanford University
Stanford, CA 94305-4070
http://www-smirc.stanford.edu
650-725-3383 (public fax; no confidential information, please)

On 5/16/2017 11:50 PM, Hubert Miller kargo_cult@... [regenrx] wrote:
>
> Tom, my conditions are a short, capacitive-reactive antenna. Tapping
> down the coil is counterproductive for this case. With the antenna and
> the headphone I use, tapping down either antenna
>
> or diode tap results in diminished output (with improved selectivity
> as result of decreased load.) There is a good reason I maximized the
> inductance in the tuned circuit.
>
> *From:* regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
> *Sent:* Tuesday, May 16, 2017 11:36 PM
> *To:* regenrx@yahoogroups.com
> *Subject:* Re: [regenrx] Re: germanium diodes testing 0.26 volts to
> 0.6 volts
>
> Hi Hue,
>
> One way to provide an impedance conversion at the input side is to
> connect the antenna to a tap on the tank, and then to drive your diode
> detector with another tap. To effect an upward transformation, the

> antenna connects to the tap closer to ground, and the diode connects
> to the tap closer to the top of the tank. If the tank has any kind of
> reasonable Q, it will perform the transformation with much higher
> efficiency than a doubler would. You will present a higher voltage to
> your diode detector (and deliver more to your load) than if a doubler
> were used.
>
> --Cheers,
> Tom
>
> --
> Prof. Thomas H. Lee
> Allen Bldg., CIS-205
> 420 Via Palou Mall
> Stanford University
> Stanford, CA 94305-4070
> http://www-smirc.stanford.edu
> 650-725-3383 (public fax; no confidential information, please)
>
> On 5/16/2017 11:26 PM, Hubert Miller kargo_cult@...
> <mailto:kargo_cult@...> [regenrx] wrote:
>
> Tom, given the circuit components I described, arranged in a
> simple crystal set, how do you achieve improved impedance
> matching? As I said, this is a simple kink to improve
>
> (an existing) basic set. I am not going for the ultimate in
> effort that Lee described, I am talking off the shelf, Radio Shack
> (once upon a time) parts. I'm not missing your point.
>
> I happen to prefer Brush piezo phones, even tho others claim the
> soundpowered are better. When I test the piezos, I do it by just
> touching the leads together, or touching
>
> one lead to a key or tool or something metal, which you can hear.
> Also with these, you can hear the 10 kHz beat note indicating a
> weak signal, maybe too weak for audio.
> (or at least I could hear 10 kHz, when I was younger.)
>
> -Hue
>
> *From:* regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>
> [mailto:regenrx@yahoogroups.com]
> *Sent:* Tuesday, May 16, 2017 11:16 PM
> *To:* regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>
> *Subject:* Re: [regenrx] Re: germanium diodes testing 0.26 volts
> to 0.6 volts
>
> Hi Hue,
>

> Please read what I took the trouble to write in detail.
>
> Summary: If you notice improvement with a doubler, it's a sign
> that your original circuit was horribly mismatched. It is not a
> sign that the doubler is "good". Throw away the doubler and add
> impedance transformation as necessary. No extra diodes, which are
> terribly lossy. The receiver will perform much better than with
> the doubler.
>
> You need to perform fair comparisons. Simply noting that the
> doubler improves performance in a limited circumstance tells you
> almost nothing about what is actually going on.
>
> --Cheers,
> Tom
>
> --
>
> Prof. Thomas H. Lee
>
> Allen Bldg., CIS-205
>
> 420 Via Palou Mall
>
> Stanford University
>
> Stanford, CA 94305-4070
>
> http://www-smirc.stanford.edu
>
> 650-725-3383 (public fax; no confidential information, please)
>
> On 5/16/2017 10:47 PM, Hubert Miller kargo_cult@...
> <mailto:kargo_cult@...> [regenrx] wrote:
>
> Because of the performance of the diode, you want to operate
> it at as high a voltage as possible for the input power - so
> this means, yes, high impedances in and out of the diode.
>
> The highest input, diode driving impedance we can get is the
> parallel tuned circuit with low ? C. Then if you have a very
> high impedance load, around 100k with some
>
> piezo phones, you do have a mismatch, but not a gross mismatch
> as the usual old-time circuit with something like 2k ? 14k ohm
> magnetic headphone. This is the circuit,
>
> a very basic circuit, I am talking about. If you add one diode
> and a 1 nF cap to this circuit, you have a fullwave voltage
> doubler and you absolutely will notice the increased output.

>
> I am NOT talking about a magnetic headphone passive receiver
> with a high-low matching audio transformer. I am not talking
> about a free lunch or magic energy. It's just a simple kink
>
> to improve the most basic crystal set circuit with just a
> couple parts, to derive power from the other half of the RF
> cycle. Some different considerations apply to the case where
>
> the output device (headphones) are very high impedance. In
> this case, you do not even need a DC circuit after the diode ?
> you can even have a capacitor in series, the "floating diode"
>
> circuit that some people say "can not work." This is a simple
> real-life experiment with real-life off-the-shelf parts. If
> you disagree, and I show you the parts you have to work with,
>
> how do you arrange them for a better impedance match?
>
> -Hue I
>
> *From:* regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com> [mailto:regenrx@yahoogroups.com]
> *Sent:* Tuesday, May 16, 2017 10:03 PM
> *To:* regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>
> *Subject:* Re: [regenrx] Re: germanium diodes testing 0.26
> volts to 0.6 volts
>
> Mr. Tongue is /absolutely correct/, and I have already given
> the reason. I'll explain it again with a bit more color.
>
> A voltage doubler doesn't magically create energy, so if an
> increase in voltage is obtained (and this is by no means
> guaranteed), it must come at the expense of a decrease in
> current because there is no source of additional energy beyond
> what is in the received signal. An increase in V, accompanied
> by a decrease in I, implies an impedance increase. That's all.
>
> For every source impedance, there is one (and only one) load
> impedance into which power delivery is maximized. That
> impedance is the complex conjugate of the source. That means
> equal resistances, and reactances that are algebraic inverses.
> By definition, if you already have matched impedances, you are
> doing the best that one can do, so adding a voltage doubler in
> that case can only worsen things. It's only in the case where
> your source impedance is too low that an upward impedance
> transformation, such as that possibly provided by a doubler,
> might improve things. If a doubler helps, it's a definite sign
> that the original configuration was very far from optimally
> designed. Far better performance would be obtained by throwing

> away the doubler, and providing a proper match.
>
> It's important to understand that a diode is a very
> inefficient impedance transformation element, and it gets more
> so as signal power drops. If you are seeking to improve
> performance, the best approach is to use an actual impedance
> matching network, rather than a diode-based circuit that
> provides an impedance transformation as an inefficient side
> effect. Low-loss matching will always outperform voltage
> "doublers".
>
> --Tom
>
>

28130. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-18 01:01:40 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28130

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Blue Grass Radio/v1a_MFJ-based-regenerative-receiver.asc
Uploaded by : bluegrass_radio <danieljackson@...>
Description : LTSpice model "v1a_MFJ-based-regenerative-receiver.asc"

In this model of the MFJ based regenerative receiver we have some step commands of the tuning supplied by Kevin B here at this group.

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Blue%20Grass%20Radio/v1a_MFJ-based-regenerative-receiver.asc

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

bluegrass_radio <danieljackson@...>

28131. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-18 01:05:09 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28131

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Blue Grass Radio/About v1a_MFJ-based-regenerative-receiver.asc
Uploaded by : bluegrass_radio <danieljackson@...>
Description : An interesting model thanks to Kevin B

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Blue%20Grass%20Radio/About%20v1a_MFJ-based-regenerative-receiver.asc

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

bluegrass_radio <danieljackson@...>

28132. RE: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-17 22:23:52 UTC
From: Hubert Miller
Topic: 28079 Message: 28132

Not that my findings are definitive, but I did not honestly get improvement with 'halfwave voltage doubler' (is this also called "charge pump" ?)
I always use the fullwave voltage doubler, the circuit where both output leads are ungrounded. It could be that my series capacitor was less than
optimum value.

-Hue

>pictures online now here:

http://www.learnmorsecode.com/regen/W6MAB/index.html

’–·–’–––

28133. Re: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-18 16:06:31 UTC
From: Jim Simmons
Topic: 28079 Message: 28133

Tom, you're preaching to the choir. I taught electronic theory, installation and maintenance of radio and computers for a little over 40 years. I developed a deep interest in electronics when I was in the third grade (I remember the exact moment the curiosity struck me). I'm a believer in theory; however, I do recall that it is theoretically impossible for a bumble bee to fly.

Theory is just our way of trying to make sense, and explain, what Mother Nature does; however, she has thrown a lot of theory in file 13 in the past. The impossible has become possible. With all our knowledge we still know very little of how things really function. da Vinci, Tesla and Einstein were hero's of mine. All were great theorist.

When things work and our theory proves to us that they can't possibly work then there's something wrong with our theory. Actuality trumps theory every single time. And, guess what, we change our theory to fit the actuality. Hi hi.

Jim, N5MSJ

On 5/17/2017 3:30 PM, Tom Lee tomlee@... [regenrx] wrote:
>
>> Theory is fine, but it's not the "end-all" to explain why some things
>> work, and other things don't work. Try a circuit and see for yourself
>> whether it works or not.
>
> Theory is, in fact, the end-all to explain things in electrical
> engineering. Experiment is of course the final arbiter of /whether or
> not/ something works, but the explanation of *why *it works (or
> doesn't) is theory. Physical intuition is helpful in inventing, but it
> only gets you so far. Without theory there's no way of knowing how
> much better your circuit could perform. Without theory, you're left
> only with unreliable lore, less reliable superstition, and almost
> wholly unreliable opinion. Some people prefer that to actual science,
> and that's fine, but if one is serious about understanding what
> they're doing, then theory it must be.
>
> Electrical engineering is extremely well understood. It would not be
> possible to construct multibillion-transistor GPUs and terabit/s
> millimeter-wave circuits were it not so. One does not design a cell
> phone -- which must successfully resolve 10 femtowatt signals in
> contested environments -- without careful adherence to theory.
>
> --Cheers,
> Tom
>

> --
> Prof. Thomas H. Lee
> Allen Bldg., CIS-205
> 420 Via Palou Mall
> Stanford University
> Stanford, CA 94305-4070
> http://www-smirc.stanford.edu
> 650-725-3383 (public fax; no confidential information, please)
> On 5/17/2017 12:45 PM, Jim Simmons orion@... [regenrx] wrote:
>>
>>
>> Way back in 1960, Popular Electronics published a voltage doubler
>> crystal receiver that would drive a loudspeaker. I built this crystal
>> set exactly as described back in 1960. This little receiver performed
>> very well. Although the volume wasn't room-filling, it was plenty
>> loud enough for night time listening. I placed the receiver on the
>> headboard of my bed and was lulled to sleep by music every night. I
>> don't remember much about the antenna, except it was a long wire
>> end-fed (probably about 20 or 30 feet long because the area where I
>> lived at the time was small. It does feature a dual-tuned input -
>> which may explain it. I didn't play around with it and remove one of
>> the diodes and see if it no longer worked. I was just happy that it
>> served my purpose. I wish I still had it, but I was in the Air Force
>> back then and through many moves during my career it was lost.
>>
>> http://www.rfcafe.com/references/popular-electronics/high-power-crystal-set-august-1960
-popular-electronics.htm
>>
>> Jim, N5MSJ
>>
>>
>> On 5/17/2017 1:15 AM, Tom Lee tomlee@... [regenrx] wrote:
>>>
>>> Hi Hue,
>>>
>>> Please read what I took the trouble to write in detail.
>>>
>>> Summary: If you notice improvement with a doubler, it's a sign that
>>> your original circuit was horribly mismatched. It is not a sign that
>>> the doubler is "good". Throw away the doubler and add impedance
>>> transformation as necessary. No extra diodes, which are terribly
>>> lossy. The receiver will perform much better than with the doubler.
>>>
>>> You need to perform fair comparisons. Simply noting that the doubler
>>> improves performance in a limited circumstance tells you almost
>>> nothing about what is actually going on.
>>>
>>> --Cheers,
>>> Tom
>>>

>>> --
>>> Prof. Thomas H. Lee
>>> Allen Bldg., CIS-205
>>> 420 Via Palou Mall
>>> Stanford University
>>> Stanford, CA 94305-4070
>>> http://www-smirc.stanford.edu
>>> 650-725-3383 (public fax; no confidential information, please)
>>> On 5/16/2017 10:47 PM, Hubert Miller kargo_cult@... [regenrx] wrote:
>>>>
>>>> Because of the performance of the diode, you want to operate it at
>>>> as high a voltage as possible for the input power - so this means,
>>>> yes, high impedances in and out of the diode.
>>>>
>>>> The highest input, diode driving impedance we can get is the
>>>> parallel tuned circuit with low ? C. Then if you have a very high
>>>> impedance load, around 100k with some
>>>>
>>>> piezo phones, you do have a mismatch, but not a gross mismatch as
>>>> the usual old-time circuit with something like 2k ? 14k ohm
>>>> magnetic headphone. This is the circuit,
>>>>
>>>> a very basic circuit, I am talking about. If you add one diode and
>>>> a 1 nF cap to this circuit, you have a fullwave voltage doubler and
>>>> you absolutely will notice the increased output.
>>>>
>>>> I am NOT talking about a magnetic headphone passive receiver with a
>>>> high-low matching audio transformer. I am not talking about a free
>>>> lunch or magic energy. It's just a simple kink
>>>>
>>>> to improve the most basic crystal set circuit with just a couple
>>>> parts, to derive power from the other half of the RF cycle. Some
>>>> different considerations apply to the case where
>>>>
>>>> the output device (headphones) are very high impedance. In this
>>>> case, you do not even need a DC circuit after the diode ? you can
>>>> even have a capacitor in series, the "floating diode"
>>>>
>>>> circuit that some people say "can not work." This is a simple
>>>> real-life experiment with real-life off-the-shelf parts. If you
>>>> disagree, and I show you the parts you have to work with,
>>>>
>>>> how do you arrange them for a better impedance match?
>>>>
>>>> -Hue I
>>>>
>>>> *From:* regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
>>>> *Sent:* Tuesday, May 16, 2017 10:03 PM
>>>> *To:* regenrx@yahoogroups.com
>>>> *Subject:* Re: [regenrx] Re: germanium diodes testing 0.26 volts to

>>>> 0.6 volts
>>>>
>>>> Mr. Tongue is /absolutely correct/, and I have already given the
>>>> reason. I'll explain it again with a bit more color.
>>>>
>>>> A voltage doubler doesn't magically create energy, so if an
>>>> increase in voltage is obtained (and this is by no means
>>>> guaranteed), it must come at the expense of a decrease in current
>>>> because there is no source of additional energy beyond what is in
>>>> the received signal. An increase in V, accompanied by a decrease in
>>>> I, implies an impedance increase. That's all.
>>>>
>>>> For every source impedance, there is one (and only one) load
>>>> impedance into which power delivery is maximized. That impedance is
>>>> the complex conjugate of the source. That means equal resistances,
>>>> and reactances that are algebraic inverses. By definition, if you
>>>> already have matched impedances, you are doing the best that one
>>>> can do, so adding a voltage doubler in that case can only worsen
>>>> things. It's only in the case where your source impedance is too
>>>> low that an upward impedance transformation, such as that possibly
>>>> provided by a doubler, might improve things. If a doubler helps,
>>>> it's a definite sign that the original configuration was very far
>>>> from optimally designed. Far better performance would be obtained
>>>> by throwing away the doubler, and providing a proper match.
>>>>
>>>> It's important to understand that a diode is a very inefficient
>>>> impedance transformation element, and it gets more so as signal
>>>> power drops. If you are seeking to improve performance, the best
>>>> approach is to use an actual impedance matching network, rather
>>>> than a diode-based circuit that provides an impedance
>>>> transformation as an inefficient side effect. Low-loss matching
>>>> will always outperform voltage "doublers".
>>>>
>>>> --Tom
>>>>
>>>
>>
>
>

28134. Bad Heath-Kit DX-20 Power Transformer For Autopsy

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-18 17:01:23 UTC
From: Sam Neal
Topic: 28134 Message: 28134

Hello,

About a week or so ago someone posted a note asking for a bad power transformer for a DX-20, apparently to check the turns ratio of the windings. I apparently deleted that e-mail.

I have one for you. I have let a lot of the smoke out of it, but there is probably plenty more left.

Say the word and it will appear at your QTH, free of charge.

73,

Sam Neal N5AF
Celebrating 60 Years In Amateur Radio

28135. Radio Shack "Globe Patrol" review ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-19 00:30:49 UTC
From: Hubert Miller
Topic: 28135 Message: 28135

I wonder if anyone here has used the Radio Shack "Globe Patrol" radio. I just batteried up one I bought at a swap.
I am kind of underimpressed. I don't know if it always worked like this or some parts have degraded or changed value.
I find the regen control the opposite of smooth; I'd call it "abrupt", the fiddly way that gave regenerative radios a bad
name in their later kit years. It also seems to have quite a bit of sensitivity to hand capacitance on tuning. I will have
another go at it after dark; not much on now. Of course at this price level there was no reduction gearing on the main
tune or bandspread controls, so probably much of my unhappiness comes from comparing it to tuning an ex-military
regen set. This example seems to very neatly built, but I note the main tuning is a poly type, low Q, and the bandspread
cap looks really low quality, very chintzy.

Maybe later I'll have a look at the schematic and see if there's room for improvement, at least in the critical
regenerative RF stage. Should be at least possible to improve that gain action in the regen stage.
-Hue

28136. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-19 08:52:20 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28136

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Blue Grass Radio/Controlled Regeneration/controlled.asc
Uploaded by : bluegrass_radio <danieljackson@...>
Description : First file of an experimental regeneration circuit devoted to ways to control the adjustments to make them smoother.

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Blue%20Grass%20Radio/Controlled%20Regeneration/controlled.asc

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

bluegrass_radio <danieljackson@...>

28137. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-19 08:53:10 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28137

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Blue Grass Radio/Controlled Regeneration/controlled-v2.asc
Uploaded by : bluegrass_radio <danieljackson@...>
Description : Version 2 of the Controlled Regeneration file which explores the tuning and bandpass of the circuit using time step plots.

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Blue%20Grass%20Radio/Controlled%20Regeneration/controlled-v2.asc

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

bluegrass_radio <danieljackson@...>

28138. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-19 08:54:57 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28138

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Blue Grass Radio/Controlled Regeneration/Notes On The Controlled Regeneration Model
Uploaded by : bluegrass_radio <danieljackson@...>
Description : Insights about the circuit design.

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Blue%20Grass%20Radio/Controlled%20Regeneration/Notes%20On%20The%20Controlled%20Regeneration%20Model

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

bluegrass_radio <danieljackson@...>

28139. Bumblebees, theory and practice.

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-19 09:56:36 UTC
From: les.au49@...
Topic: 28139 Message: 28139

Tom Lee wrote a concise posting about the importance of matching the impedance of a load to the impedance of the source, and the value of understanding why this is so.

AC circuit theory is a well-understood topic in basic physics, and the idea that there may be some flaw in our understanding of this topic, or the mathematics surrounding the theory is ... well .... amusing.

For anyone who would like to refer to bumble-bees as an example of how practice trumps theory I provide this link:

http://www.abc.net.au/science/articles/2014/07/29/4056181.htm
http://www.abc.net.au/science/articles/2014/07/29/4056181.htm

Please read the link carefully before dumping more on this topic.

The history of scientific thought has a number of examples of HYPOTHESES that were once popular, but were discarded; there are a number of THEORIES that are better understood today than the time they were first stated BUT I doubt whether "better understood" amounts to "overturning". A most instructive example would be the "overturning" of Newton's Theory of Universal Gravitation by Einstein. Many scientists have "had a go" at Newton's theories, including Richard Feynman. My point here is that a hypothesis is NOT a theory, and I know of no THEORY in science that has been discarded.

Then in 1905 and again in the year 1915 (I believe) Einstein provided a greater insight. It's possible we may, someday, get a better understanding of AC circuit theory, in the same way that Einstein gave greater understanding of Newton BUT I doubt that understanding can ever overturn "theory". As for voltage doubling detectors in crystal sets and impedance matching - I urge you to consider Tom's instructive argument carefully!

I feel a little embarrassed in defending Tom's argument. After all, he knows a good deal more on this topic than I do.

Again, I feel embarrassed because the idea of pointing to the advantage of understanding basic AC theory should not be necessary in this group.

To conclude: Tom has presented a concise explanation for why a voltage doubling detector has no advantage over a circuit that correctly matches the source impedance (here the aerial) to the load (the detector/headphones). Thimk deaply on this poynt!

Les Smith.

PS "Go" Tom!! "Go" maths! "Go" the law of conservation of energy. (This is the basis of the rule about impedance matching.) Now I sit back and watch the flames roll in!! Life is fun!!

28140. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-19 14:37:14 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28140

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Blue Grass Radio/Controlled Regeneration/controlled-v2.asc
Uploaded by : bluegrass_radio <danieljackson@...>
Description : tuning step model

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Blue%20Grass%20Radio/Controlled%20Regeneration/controlled-v2.asc

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

bluegrass_radio <danieljackson@...>

28141. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-19 14:37:34 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28141

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Blue Grass Radio/Controlled Regeneration/controlled.asc
Uploaded by : bluegrass_radio <danieljackson@...>
Description : modulation test model

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Blue%20Grass%20Radio/Controlled%20Regeneration/controlled.asc

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

bluegrass_radio <danieljackson@...>

28142. Re: [regenrx] Bumblebees, theory and practice.

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-19 15:52:33 UTC
From: Tom Lee
Topic: 28139 Message: 28142

Thanks very much, Les, for linking to the article about the bumble-bee
urban legend, and for your stalwart defense of the scientific method
(and of maths)!

-- Cheers,
Tom

--
Prof. Thomas H. Lee
Allen Bldg., CIS-205
420 Via Palou Mall
Stanford University
Stanford, CA 94305-4070
http://www-smirc.stanford.edu
650-725-3383 (public fax; no confidential information, please)

On 5/19/2017 2:56 AM, les.au49@... [regenrx] wrote:
>
> Tom Lee wrote a concise posting about the importance of matching the
> impedance of a load to the impedance of the source, and the value of
> understanding why this is so.
>
> AC circuit theory is a well-understood topic in basic physics, and the
> idea that there may be some flaw in our understanding of this topic,
> or the mathematics surrounding the theory is ... well .... amusing.
>
> For anyone who would like to refer to bumble-bees as an example of how
> practice trumps theory I provide this link:
>
> http://www.abc.net.au/science/articles/2014/07/29/4056181.htm
>
> Please read the link carefully before dumping more on this topic.
>
> The history of scientific thought has a number of examples of
> HYPOTHESES that were once popular, but were discarded; there are a
> number of THEORIES that are better understood today than the time they
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> ever overturn "theory". As for voltage doubling detectors in crystal
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> Les Smith.
>
>
> PS "Go" Tom!! "Go" maths! "Go" the law of conservation of
> energy. (This is the basis of the rule about impedance matching.)
> Now I sit back and watch the flames roll in!! Life is fun!!
>
>
>

28143. Re: [regenrx] Bumblebees, theory and practice.

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-19 19:08:16 UTC
From: Baruch Atta
Topic: 28139 Message: 28143

There is no difference between theory and practice, in theory. In practice, there is.

On Fri, May 19, 2017 at 5:56 AM, les.au49@... [regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> Tom Lee wrote a concise posting about the importance of matching the
> impedance of a load to the impedance of the source, and the value of
> understanding why this is so.
>
> AC circuit theory is a well-understood topic in basic physics, and the
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> To conclude: Tom has presented a concise explanation for why a voltage
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> PS "Go" Tom!! "Go" maths! "Go" the law of conservation of energy.
> (This is the basis of the rule about impedance matching.) Now I sit back
> and watch the flames roll in!! Life is fun!!
>
>
>
>

28144. RE: [regenrx] Bumblebees, theory and practice.

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-19 20:00:57 UTC
From: Hubert Miller
Topic: 28139 Message: 28144

No one is saying bees shouldn't fly, or can't fly, or they don't have fun doing it.
I don't care what others may or may not have said to deprecate physics here.
I suggested for a simple crystal radio, or as an addition to an existing simple crystal radio, even commercial product ones,
you could add a couple parts and yes, actually experience a boost in volume. It is true that attention to antenna matching
and output matching boost volume. Everyone knows you want as high impedance phones as you can find, barring an output
matching transformer. As for antenna matching, yes, but you know what, it is NOT a precise adjustment for our receiving
purpose and less than perfect will actually not radically affect your result. In my trials with the circuit, I did use an L network,
or the equivalent of a pi- net if you consider the (relatively small) capacitance of the antenna. This is a tried & true circuit
from many years ago, as I gave examples. Combine this with a full-wave rectifier and you extract more energy from the
wave than with an even more minimal part count. I am not talking about perpetual motion, free universal energy magic.
If you don't believe me or don't want to believe me, or others who have built the circuit, I invite you, again, to actually lash
it up on your desk. It's not really that hard, is it?
-Hue

28145. Uses single-bearing variable caps

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-19 19:41:26 UTC
From: Hubert Miller
Topic: 28145 Message: 28145

I was last night looking at the ARRL pub "How To Become a Radio Amateur", 1953, this is the early one with the single-valve receiver
and single-valve "slatboard" transmitter, and in the photo I note the bandspread, main tune, and regen controls are all single bearing
variables, so I conclude, at least for "beginner quality" function, these parts are adequate. The text explains that altho the receiver is
bare-bones minimum, it actually does function to communicate over distance. The article is for ARRL work, disappointingly
not so well proofread. The receiver project includes 2 coils but does not actually state the frequency range of the second coil except
that it tunes 40 and 20 meter bands. The grid resistor is stated as 15M but I suspect this is possibly a misprint and they intended 1.5M;
a resistor in the two-digits megohm range is what I have often seen in valve superregen circuits, as the high value grid resistor with
lots of feedback causes periodic blocking of tube conduction - which is superregen function. I would like to build this receiver and
experience just how well such a simple device works out for long distance coverage, but I can't bite on another project now. The
receiver calls for a 5 x 7 x 2 inch chassis and 6 x 7 inch front panel piece. Maybe I'll start at least looking for this metal, to start with,
or have one of you who are capable, make such for me.
The transmitter section of the article states that it covers 80, 40 meters with 2 coils, but there is no detail on how to make the second
coil. Not that big a deal, but for an absolute beginner these errors didn't help.
-H

28146. RE: Uses single-bearing variable caps

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-19 20:17:04 UTC
From: Hubert Miller
Topic: 28145 Message: 28146

Since I found myself with an abundance of single-bearing 15-250 pF variables, and the ARRL project in the '53 book
calls for 100 pF, I decided to try the old kink of pulling rotor plates off a sacrifice capacitor. I found with care this is
very do-able. This is a less desirable option than using the original spec part, as when you're done, you have unused
unnecessary stator (fixed) capacitor plates out there in the breeze being sensitive to temperature variations, but it
is a workable option. I'm wondering if I can get down to a capacitance number for the bandspread capacitor role;
I'm going to try for it.
-Hue

28147. Re: [regenrx] RE: Uses single-bearing variable caps

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-19 20:34:35 UTC
From: Jim Wiley
Topic: 28145 Message: 28147

All -

It never ceases to amaze me how many experimenters manage to forget the idea of using a series fixed capacitor to make a larger capacitor, either fixed or variable, smaller (electrically). The advantage is of course that the original variable capacitor is not physically damaged by doing this, and can be used in another design if the first does not work out for some reason. The value of the needed series cap can be determined by trial and error, or more precisely by resorting to some basic math. Why permanently damage an increasingly rare part for the sake of expediency? Just my 2-cents worth.

- Jim, KL7CC

On 5/19/2017 12:17 PM, Hubert Miller kargo_cult@... [regenrx] wrote:
>
> Since I found myself with an abundance of single-bearing 15-250 pF
> variables, and the ARRL project in the '53 book
>
> calls for 100 pF, I decided to try the old kink of pulling rotor
> plates off a sacrifice capacitor. I found with care this is
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> very do-able. This is a less desirable option than using the original
> spec part, as when you're done, you have unused
>
> unnecessary stator (fixed) capacitor plates out there in the breeze
> being sensitive to temperature variations, but it
>
> is a workable option. I'm wondering if I can get down to a capacitance
> number for the bandspread capacitor role;
>
> I'm going to try for it.
>
> -Hue
>
>

28148. RE: [regenrx] RE: Uses single-bearing variable caps

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-19 21:13:42 UTC
From: Hubert Miller
Topic: 28145 Message: 28148

I would agree with your note if in the next to last sentence you said "increasingly rare existing radio" .
The part I am working with is not a full-frame high quality sought-after capacitor. It does not have the fiber stator plate connecting
piece between flimsy plates some BC type radio variables have. This piece is pretty robustly built and I detected that removing plates
does not weaken it like what happens with many capacitors. I have seen articles on decreasing the tuning range of some radios
by inserting series capacitors in each gang; I agree that's the only way to do this, if you want to achieve that.
Also, getting down to 20 pF for a bandspread capacitor by inserting a series capacitor to a 250 pF variable strikes me as kind of
silly. I am not sure removing plates from this 250 pF down to 20 pF is practical either; it won't have a very good max/min range,
but I'm going to see. I can sacrifice one to see how practical or impractical this is.
Unlike with full-frame variables, the plates in this
single bearing trimmer type capacitor are easy to access.
I agree that if you have a good quality "real" variable capacitor, don't hack it.

>All -

It never ceases to amaze me how many experimenters manage to forget the idea of using a series fixed capacitor to make a larger capacitor, either fixed or variable, smaller (electrically). The advantage is of course that the original variable capacitor is not physically damaged by doing this, and can be used in another design if the first does not work out for some reason. The value of the needed series cap can be determined by trial and error, or more precisely by resorting to some basic math. Why permanently damage an increasingly rare part for the sake of expediency? Just my 2-cents worth.

- Jim, KL7CC

On 5/19/2017 12:17 PM, Hubert Miller kargo_cult@...<mailto:kargo_cult@...> [regenrx] wrote:

Since I found myself with an abundance of single-bearing 15-250 pF variables, and the ARRL project in the '53 book
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very do-able. This is a less desirable option than using the original spec part, as when you're done, you have unused
unnecessary stator (fixed) capacitor plates out there in the breeze being sensitive to temperature variations, but it
is a workable option. I'm wondering if I can get down to a capacitance number for the bandspread capacitor role;
I'm going to try for it.
-Hue

28149. RE: [Glowbugs] Uses single-bearing variable caps

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-19 21:19:16 UTC
From: Hubert Miller
Topic: 28149 Message: 28149

I didn't see the kit on Epay, with keywords "kit radio", "tube radio kit", or "shortwave kit". What should I be looking for?
thanks-
Hue

>Somebody on eBa…er, I mean “that auction place” is replicating the entire kit faithful to McCoy’s original article for about sixty dollars US…
Failing that, contact me off list; I do have metalworking equipment…
73, Brian KA9EGW

28150. RE: [regenrx] RE: Uses single-bearing variable caps

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-19 21:46:29 UTC
From: Hubert Miller
Topic: 28145 Message: 28150

The single-bearing caps I have are screwdriver adjust with locking collar. I had asked about how to extend the very short exposed
tuning shaft. The way these caps work is this. There is the threaded shaft bushing where the nut holds the capacitor to the panel.
To the front of this bushing is a narrower diameter bushing which tapers down to the front and also is split longitudinally in 3 cuts to
its length. Thus the locking collar nut as it is threaded on tightens this bushing against the tuning shaft preventing rotation. I found
that I can saw around this front bushing and as I do so, its three parts (or tines or prongs) just fall off. This does not damage the
mounting threads to the rear of this collar. This leaves an exposed shaft of 5/16 inch which is enough for many of the smaller knobs.
Or more to grip onto for a shaft coupler. "The price was right" on these. The coupler also had two high quality airdux type coils and
a score of high voltage fixed RF capacitors.
-Hue

28151. RE: [regenrx] Bumblebees, theory and practice.

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-19 22:13:01 UTC
From: Hubert Miller
Topic: 28139 Message: 28151

I thought I'd better fine-tune my previous note, remembering my little experiments.
YES, antenna matching is very important! I have never been a fan of the circuits that use a "one size fits all" type input, I mean something like a fixed
input coil. That is leaving precious picowatts on the table. I DID find that attention to better antenna matching, for maximum current from the antenna,
gives a big boost to volume, and so it's essential. The series circuit used in the Heathkit CR-1 and some others does this practically and effectively. I have
not invested again in soundpowered phones after having a bad experience with defective ones, defective not unexpected after so many years. I just like
the piezo phones for their very high impedance with lower cost and complication, and I like their tonal response – some people don't. And as I said, when
I can hear it in the headphone when I just touch the leads together, that impresses me. I am suggesting anyone interested try the voltage doubler as an
addition to this simple circuit, I mean matching-tuning input circuit, High impedance phones, and see if it's worthwhile.
-Hue

28152. Re: germanium diodes testing 0.26 volts to 0.6 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-19 22:49:37 UTC
From: jjdobrikin@...
Topic: 28079 Message: 28152

Hi

I have been following these messages with great interest for use of various types of Detectors for my Sr Citizens SWL/Scanner Club's project of building some Steampunk Crystal Radios using a combination of Antique/Vintage components with Modern components & circuitry. To come up with an Object de Arte as well as a highly functional Radio.

The basic detectors will be a Cats Whisker and a high quality 1N34A; as well as a set of banana jacks to allow moving to other LEVELS both Up, Schotkky , MOSFET and Infinite Impedance circuit boards & Down, Foxhole Razor, Blade. Rusty Nail etc. etc...

We are looking for comment/advice both anecdotal and theoretical, Now off to a little off topic off topic, We have a couple of Antique TRF 3 RF Stages Radios (Atwater Kent Model 2 C 4640 Big Box) that we want to convert to lower voltage, Solid State or Hollow State. We are exploring the Idea of using Radios on a Chip and Simple Radio PCB's as RF amplifiers. Essentially not bleeding off the RF to ground at the Detector and directing RF to the next stage.

Now to put the Fox in the Chicken House or more aptly the Bee Hive.
Them's that can, do, them's that can't, teach.
Technicians are hands on at the bench, Engineers theorize at the desk

73 de Jordan ve7jjd

---In regenrx@yahoogroups.com, <roomberg@...> wrote :

When testing diodes with a simple digital meter with a diode checker function I sort of expect
to see 0.6 volts on a 1N4007 or a 1N4148

and buy germanium diodes for radio receiver circuits..... expecting something more like 0.3 volts.

The Russian diodes have stripes.... with no real pattern of always being on the cathode (-)

http://www.learnmorsecode.com/regen/diodesstripes.jpg
http://www.learnmorsecode.com/regen/diodesstripes.jpg
http://www.learnmorsecode.com/regen/diodestripes2.jpg
http://www.learnmorsecode.com/regen/diodestripes2.jpg

I thought that the idea that plain silicon diodes like 1N4007 and 1N4148 were not of any use in simple crystal radio circuits because they have that 0.6 voltage drop while the historic ...in every text book crystal radio circuit.. 1N34A was supposed to be half that voltage.

I did a comparison with 8 different cat whisker germanium diodes.
I have one that is a mystery.... no markings... so I just called it BULGARIAN.
My 1N34A diodes consistently tested between 0.38 and 0.4

The BULGARIAN diodes all tested real close to 0.6

While the Russian diodes where 0.32 to 0.38

and the Russian D311 (black beauties) were 0.23

AND
just for giggles I will toss in the modern SCHOTTKY 1N5711 at 0.27

I have used the 1N5711 successfully in the bare bones simple crystal radio...big coil with slider.

http://www.learnmorsecode.com/help/alldiodes.jpg
http://www.learnmorsecode.com/help/alldiodes.jpg

So it looks like the D311 is the lowest and I assume it would be best for simple crystal radio RF circuits...
but I hear no difference between any of these GERMANIUM diodes.... they all receive AM broadcast radio here.

http://www.learnmorsecode.com/help/D311diode.jpg
http://www.learnmorsecode.com/help/D311diode.jpg

28153. Re: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-19 23:02:31 UTC
From: Jordan Dobrikin
Topic: 28079 Message: 28153

OOPS..........
I left out a sub topic.
The use of Diodes in parallel including LED's to get some visuals on strong signals.
Also using a microamp meter to get some hard data.

"Urban Legend" was the phrase I was looking for in my Bee Hive message.

Hi

Thanx
73 de Jordan ve7jjd

On Fri, May 19, 2017 at 3:49 PM, jjdobrikin@... [regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> Hi
>
> I have been following these messages with great interest for use of
> various types of Detectors for my Sr Citizens SWL/Scanner Club's project of
> building some Steampunk Crystal Radios using a combination of
> Antique/Vintage components with Modern components & circuitry. To come up
> with an Object de Arte as well as a highly functional Radio.
>
> The basic detectors will be a Cats Whisker and a high quality 1N34A; as
> well as a set of banana jacks to allow moving to other LEVELS both Up,
> Schotkky , MOSFET and Infinite Impedance circuit boards & Down, Foxhole
> Razor, Blade. Rusty Nail etc. etc...
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> We are looking for comment/advice both anecdotal and theoretical, Now off
> to a little off topic off topic, We have a couple of Antique TRF 3 RF
> Stages Radios (Atwater Kent Model 2 C 4640 Big Box) that we want to convert
> to lower voltage, Solid State or Hollow State. We are exploring the Idea
> of using Radios on a Chip and Simple Radio PCB's as RF amplifiers.
> Essentially not bleeding off the RF to ground at the Detector and directing
> RF to the next stage.
>
> Now to put the Fox in the Chicken House or more aptly the Bee Hive.
> Them's that can, do, them's that can't, teach.
> Technicians are hands on at the bench, Engineers theorize at the desk
>
> 73 de Jordan ve7jjd
>
>

> ---In regenrx@yahoogroups.com, <roomberg@...> wrote :
>
> When testing diodes with a simple digital meter with a diode checker
> function I sort of expect
> to see 0.6 volts on a 1N4007 or a 1N4148
>
> and buy germanium diodes for radio receiver circuits..... expecting
> something more like 0.3 volts.
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> The Russian diodes have stripes.... with no real pattern of always being
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> http://www.learnmorsecode.com/regen/diodesstripes.jpg
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> just for giggles I will toss in the modern SCHOTTKY 1N5711 at 0.27
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> I have used the 1N5711 successfully in the bare bones simple crystal
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>
> So it looks like the D311 is the lowest and I assume it would be best for
> simple crystal radio RF circuits...
> but I hear no difference between any of these GERMANIUM diodes.... they
> all receive AM broadcast radio here.
>
> http://www.learnmorsecode.com/help/D311diode.jpg
>
>
>
>
>

28154. Single bearing capacitor project finished

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-20 01:21:31 UTC
From: Hubert Miller
Topic: 28154 Message: 28154

Pulling 12 rotor plates from this variable capacitor, I finished with a range of 7-90 pF. I overshot a little, as with one more plate left on,
it was 105 pF. I am pretty happy with the result. I converted a screwdriver adjust, minimally useful component to useful
component for a minimal receiver.
-H

28155. RE: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-20 01:56:57 UTC
From: Hubert Miller
Topic: 28079 Message: 28155

Here's what I think about your question. If you get a strong enough signal to light LEDs, I say WOW! You either have a hellacious large antenna and/or are quite close to a broadcast station. Also your LEDs will not work at any level signal but extremely strong.

As for the current meter, you want to find a 50 uA meter or better. A large meter face is nice. Good luck! I found a few 30 uA large meters which I tweaked down to about 25 uA. Trying to remember, but I seem to recall 10 uA meant – in my situation – a readable signal. This is for pretty low level signals. If meter pegs on strong signals, have a toggle switch to switch in a parallel resistor to increase the range.
The series microamp meter will only work with magnetic headphone circuit. It will not register any current with piezo or ceramic headphones.
-Hue
From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Friday, May 19, 2017 4:03 PM
To: regenrx <regenrx@yahoogroups.com>
Subject: Re: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

OOPS.....
I left out a sub topic.
The use of Diodes in parallel including LED's to get some visuals on strong signals.
Also using a microamp meter to get some hard data.

"Urban Legend" was the phrase I was looking for in my Bee Hive message.

Hi

Thanx
73 de Jordan ve7jjd

On Fri, May 19, 2017 at 3:49 PM, jjdobrikin@gmail.com<mailto:jjdobrikin@gmail.com> [regenrx] <regenrx@yahoogroups.com<mailto:regenrx@yahoogroups.com>> wrote:

Hi

I have been following these messages with great interest for use of various types of Detectors for my Sr Citizens SWL/Scanner Club's project of building some Steampunk Crystal Radios using a combination of Antique/Vintage components with Modern components & circuitry. To come up with an Object de Arte as well as a highly functional Radio.

The basic detectors will be a Cats Whisker and a high quality 1N34A; as well as a set of banana jacks to allow moving to other LEVELS both Up, Schotkky , MOSFET and Infinite Impedance circuit boards & Down, Foxhole Razor, Blade. Rusty Nail etc. etc...

We are looking for comment/advice both anecdotal and theoretical, Now off to a little off topic off topic, We have a couple of Antique TRF 3 RF Stages Radios (Atwater Kent Model 2 C 4640 Big Box) that we want to convert to lower voltage, Solid State or Hollow State. We are exploring the Idea of using Radios on a Chip and Simple Radio PCB's as RF amplifiers.

Essentially not bleeding off the RF to ground at the Detector and directing RF to the next stage.

Now to put the Fox in the Chicken House or more aptly the Bee Hive.
Them's that can, do, them's that can't, teach.
Technicians are hands on at the bench, Engineers theorize at the desk

73 de Jordan ve7jjd

---In regenrx@yahoogroups.com<mailto:regenrx@yahoogroups.com>,
<roomberg@...<mailto:roomberg@...>> wrote :
When testing diodes with a simple digital meter with a diode checker function I sort of expect
to see 0.6 volts on a 1N4007 or a 1N4148

and buy germanium diodes for radio receiver circuits..... expecting something more like 0.3 volts.

The Russian diodes have stripes.... with no real pattern of always being on the cathode (-)

http://www.learnmorsecode.com/regen/diodesstripes.jpg
http://www.learnmorsecode.com/regen/diodestripes2.jpg

I thought that the idea that plain silicon diodes like 1N4007 and 1N4148 were not of any use in simple crystal radio circuits because they have that 0.6 voltage drop while the historic ...in every text book crystal radio circuit.. 1N34A was supposed to be half that voltage.

I did a comparison with 8 different cat whisker germanium diodes.
I have one that is a mystery.... no markings... so I just called it BULGARIAN.
My 1N34A diodes consistently tested between 0.38 and 0.4

The BULGARIAN diodes all tested real close to 0.6

While the Russian diodes where 0.32 to 0.38

and the Russian D311 (black beauties) were 0.23

AND
just for giggles I will toss in the modern SCHOTTKY 1N5711 at 0.27

I have used the 1N5711 successfully in the bare bones simple crystal radio...big coil with slider.

http://www.learnmorsecode.com/help/alldiodes.jpg

So it looks like the D311 is the lowest and I assume it would be best for simple crystal radio RF circuits...
but I hear no difference between any of these GERMANIUM diodes.... they all receive AM broadcast radio here.

http://www.learnmorsecode.com/help/D311diode.jpg

28156. RE: [Glowbugs] RE: [regenrx] RE: Uses single-bearing variable caps

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-20 03:21:04 UTC
From: Hubert Miller
Topic: 28156 Message: 28156

Hmmm….i don't recall seeing anything sturdy enough on my last shopping trip there. I'll have another look.
-Hue

>Cheap and easy chassis..... square or rectangular cake pans from the dollar store.

That's my plan when I have some free time.

73
Gary MacGregor KF5DZQ

28157. Re: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6 volts

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-20 03:47:19 UTC
From: Jordan Dobrikin
Topic: 28079 Message: 28157

Hi
Thanks for the Response.
I know it will only work with a strong Local but it does add a little sex appeal/pizzazz to the Steampunk.

I purchased some Buzzers to use as a wide band signal generator to aid Cats Whisker in finding sweet spots. Since I would be adding a battery i am thinking of using it for a forward bias circuit to optimize the Detector(s) with a micro amp meter.

Thanx again
73 de Jordan ve7jjd

On Fri, May 19, 2017 at 6:56 PM, Hubert Miller kargo_cult@... [regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> Here's what I think about your question. If you get a strong enough signal
> to light LEDs, I say WOW! You either have a hellacious large antenna and/or
> are quite close to
>
> a broadcast station. Also your LEDs will not work at any level signal but
> extremely strong.
>
>
>
> As for the current meter, you want to find a 50 uA meter or better. A
> large meter face is nice. Good luck! I found a few 30 uA large meters which
> I tweaked down to about
>
> 25 uA. Trying to remember, but I seem to recall 10 uA meant – in my
> situation – a readable signal. This is for pretty low level signals. If
> meter pegs on strong signals, have
>
> a toggle switch to switch in a parallel resistor to increase the range.
>
> The series microamp meter will only work with magnetic headphone circuit.
> It will not register any current with piezo or ceramic headphones.
>
> -Hue
>
> *From:* regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
> *Sent:* Friday, May 19, 2017 4:03 PM
> *To:* regenrx <regenrx@yahoogroups.com>
> *Subject:* Re: [regenrx] Re: germanium diodes testing 0.26 volts to 0.6

> volts
>
>
>
>
>
> OOPS...........
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> The use of Diodes in parallel including LED's to get some visuals on
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> Thanx
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> 73 de Jordan ve7jjd
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> regenrx@yahoogroups.com> wrote:
>
>
>
> Hi
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> I have been following these messages with great interest for use of
> various types of Detectors for my Sr Citizens SWL/Scanner Club's project of
> building some Steampunk Crystal Radios using a combination of

> Antique/Vintage components with Modern components & circuitry. To come up
> with an Object de Arte as well as a highly functional Radio.
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> The basic detectors will be a Cats Whisker and a high quality 1N34A; as
> well as a set of banana jacks to allow moving to other LEVELS both Up,
> Schotkky , MOSFET and Infinite Impedance circuit boards & Down, Foxhole
> Razor, Blade. Rusty Nail etc. etc...
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> We are looking for comment/advice both anecdotal and theoretical, Now off
> to a little off topic off topic, We have a couple of Antique TRF 3 RF
> Stages Radios (Atwater Kent Model 2 C 4640 Big Box) that we want to convert
> to lower voltage, Solid State or Hollow State. We are exploring the Idea
> of using Radios on a Chip and Simple Radio PCB's as RF amplifiers.
> Essentially not bleeding off the RF to ground at the Detector and directing
> RF to the next stage.
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> Now to put the Fox in the Chicken House or more aptly the Bee Hive.
> Them's that can, do, them's that can't, teach.
> Technicians are hands on at the bench, Engineers theorize at the desk
>
> 73 de Jordan ve7jjd
>
>
>
> ---In regenrx@yahoogroups.com, <roomberg@...> wrote :
>
> When testing diodes with a simple digital meter with a diode checker
> function I sort of expect
> to see 0.6 volts on a 1N4007 or a 1N4148
>
> and buy germanium diodes for radio receiver circuits..... expecting
> something more like 0.3 volts.
>
> The Russian diodes have stripes.... with no real pattern of always being
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> http://www.learnmorsecode.com/regen/diodesstripes.jpg
> http://www.learnmorsecode.com/regen/diodestripes2.jpg
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> I thought that the idea that plain silicon diodes like 1N4007 and 1N4148
> were not of any use in simple crystal radio circuits because they have that
> 0.6 voltage drop while the historic ...in every text book crystal radio
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> I did a comparison with 8 different cat whisker germanium diodes.
> I have one that is a mystery.... no markings... so I just called it
> BULGARIAN.
> My 1N34A diodes consistently tested between 0.38 and 0.4
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> The BULGARIAN diodes all tested real close to 0.6

>
> While the Russian diodes where 0.32 to 0.38
>
> and the Russian D311 (black beauties) were 0.23
>
> AND
> just for giggles I will toss in the modern SCHOTTKY 1N5711 at 0.27
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> I have used the 1N5711 successfully in the bare bones simple crystal
> radio...big coil with slider.
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> http://www.learnmorsecode.com/help/alldiodes.jpg
>
> So it looks like the D311 is the lowest and I assume it would be best for
> simple crystal radio RF circuits...
> but I hear no difference between any of these GERMANIUM diodes.... they
> all receive AM broadcast radio here.
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> http://www.learnmorsecode.com/help/D311diode.jpg
>
>
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>
>
>

28158. Re: [regenrx] Single bearing capacitor project finished

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-20 06:12:41 UTC
From: J Ed
Topic: 28154 Message: 28158

Was this a capacitor built from scratch? I'm sure we all would like to see photos. I've tried to make my own capacitors before but they mostly ended in aggravation.

Ed AE7TE

On May 20, 2017 04:21, "Hubert Miller kargo_cult@msn.com [regenrx]" <regenrx@yahoogroups.com> wrote:

>
>
> Pulling 12 rotor plates from this variable capacitor, I finished with a
> range of 7-90 pF. I overshot a little, as with one more plate left on,
>
> it was 105 pF. I am pretty happy with the result. I converted a
> screwdriver adjust, minimally useful component to useful
>
> component for a minimal receiver.
>
> -H
>
>

28159. RE: [regenrx] Single bearing capacitor project finished

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-20 06:46:56 UTC
From: Hubert Miller
Topic: 28154 Message: 28159

No – it was a screwdriver adjust, no knob shaft, locking collar trimmer cap. I did some simple modifications to make it more usable.
Some of us have made homebrew capacitors, but they're at the 'crystal radio' level, not really with the robustness or resetability or stability for VFO use.
I recall seeing somewhere advertised for the ham radio market, some kind of kits for transmit level high voltage variable capacitors, kits produced by some individual with I suppose, a well equipped machine shop.

>Was this a capacitor built from scratch? I'm sure we all would like to see photos. I've tried to make my own capacitors before but they mostly ended in aggravation.
Ed AE7TE

28160. Is the transformer required to drive the piezo element?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-20 17:13:37 UTC
From: Rob
Topic: 28160 Message: 28160

Is the transformer required to drive the piezo element?

I stumbled onto this INSTRUCTABLE that shows how to make a piezo element vibrate on
anything... box... glass .. anything.....

but there is ZERO theory explanation of the parts.
I crushed the PDF into one image here:
http://www.learnmorsecode.com/regen7/piezo1.jpg

It uses an audio output transformer .... I believe it is 8 ohms to 2K ohms with the 2K ohm side attached to the peizo element.

Is this transformer required if I want to attach this
http://www.learnmorsecode.com/help/LM386amp.JPG
http://www.learnmorsecode.com/help/LM386kit.jpg
LM386 circuit to the piezo?

28161. super Litz wire

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-20 19:21:59 UTC
From: Hubert Miller
Topic: 28161 Message: 28161

I see Epay has some Litz wire of 3000 strands. At around $38 a meter, you have to be a serious crystal radio experimenter to invest in that.
Due to language hurdle, we don't hear a lot about it here, but there seems to be a very enthusiastic following in China for crystal radios.
Back many years ago, when I scrounged a couple spools of 36 strand Litz, I felt I had scored a big deal, but now that's nowhereville.
-H

28162. Re: [regenrx] Is the transformer required to drive the piezo element?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-20 21:12:37 UTC
From: Jordan Dobrikin
Topic: 28160 Message: 28162

Hi

Is there an Ebay Listing for the System?
Checking the Specifications of the Radio Shack Parts leads to an Answer of
yes & no.
The ultimate aim is to supply a significant amount of electrical power to a
transducer that converts to mechanical power.
The key is what is the Impedance of the Transducer?
Conventional Audio Amplifier take a low voltage, low power, high impedance
signal and converts to high power, low impedance, output, Loudspeaker(s).
Piezoelectric devices are inherently High Impedance. So in your case with a
conventional amplifier with a Low Impedance output the transformer is used
backwards Low Impedance to High Impedance

http://classroom.materials.ac.uk/casePiez.php

Thanx
73 de Jordan ve7jjd

https://www.google.ca/search?q=piezoelectric&ie=utf-8&oe=utf-8&gws_rd=cr&ei=Jq4gWcHkM9CajwOO_Ku4BA

On Sat, May 20, 2017 at 10:13 AM, Rob roomberg@... [regenrx] <
regenrx@yahoogroups.com> wrote:

>
>
> Is the transformer required to drive the piezo element?
>
>
> I stumbled onto this INSTRUCTABLE that shows how to make a piezo element
> vibrate on
> anything... box... glass .. anything.....
>
> but there is ZERO theory explanation of the parts.
> I crushed the PDF into one image here:
> http://www.learnmorsecode.com/regen7/piezo1.jpg
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> It uses an audio output transformer .... I believe it is 8 ohms to 2K ohms
> with the 2K ohm side attached to the peizo element.
>
> Is this transformer required if I want to attach this
> http://www.learnmorsecode.com/help/LM386amp.JPG
> http://www.learnmorsecode.com/help/LM386kit.jpg
> LM386 circuit to the piezo?
>

>
>

28163. RE: [regenrx] Is the transformer required to drive the piezo element?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-20 21:58:07 UTC
From: Hubert Miller
Topic: 28160 Message: 28163

This topic has me wondering about the history of piezo earphone devices. I was looking at a B-A company catalog last nite, catalog from around 1938, and it
listed a pair of piezo phones, price then IIR $5.39 I didn't know they went that far back. Then I wondered when the small import piezo single earpieces came
in. I have to guess around mid 1950s or late 1950s, when the first Japanese "rocket radio" and other such "pocket crystal radios" started coming in. (I think
maybe the very high impedance of this output device made possible the crystal set usability without a ground connection, which I think made these a lot
easier to sell then the "Midway Company" pocket sets of the 1940s-1950s, with magnetic phones, and had ground and antenna wires.) I'm going to try to
nail down more precisely the dates of the inception of these products.
I recall there was an article in "Elementary Electronics" of yesteryear with a title of something like "Grow your own crystal earphone", which sounds pretty
intriguing.
Digressing – we discussed this on another group – IIRC B-A Company in Kansas City shows up in a scene in the movie "In Cold Blood", which was a dramatization
of Truman Capote's influential and best selling 1950s true crime account. This is in an early scene at the Kansas City bus depot where one of the drifters shows
up in town. This probably means something only to other OT types.
-Hue

28164. piezo BONEPHONE to listen to MP3 while swimming

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-20 23:29:05 UTC
From: Rob
Topic: 28164 Message: 28164

piezo BONEPHONE to listen to MP3 while swimming
http://www.learnmorsecode.com/bonephone/index.html

28165. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-21 00:22:16 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28165

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Blue Grass Radio/SDR Quadrature Detector/SDR-Quadrature-Detector.asc
Uploaded by : bluegrass_radio <danieljackson@...>
Description : LTSpice model of a quadrature detector using two op amps and a dual d flip flop and inverter chip. The LO IN is a sinewave signal source.

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Blue%20Grass%20Radio/SDR%20Quadrature%20Detector/SDR-Quadrature-Detector.asc

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

bluegrass_radio <danieljackson@...>

28166. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-21 00:23:24 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28166

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Blue Grass Radio/SDR Quadrature Detector/I-Q SDR Detector
Uploaded by : bluegrass_radio <danieljackson@...>
Description : I-Q SDR Detector With Dual D Flip Flop Phase Splitter

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Blue%20Grass%20Radio/SDR%20Quadrature%20
Detector/I-Q%20SDR%20Detector

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

bluegrass_radio <danieljackson@...>

28167. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-21 00:24:37 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28167

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Blue Grass Radio/SDR Quadrature Detector/SDR.png
Uploaded by : bluegrass_radio <danieljackson@...>
Description : Circuit diagram of the LTSpice model in this folder.

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Blue%20Grass%20Radio/SDR%20Quadrature%20
Detector/SDR.png

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

bluegrass_radio <danieljackson@...>

28168. Re: Bumblebees, theory and practice.

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-21 03:45:39 UTC
From: les.au49@...
Topic: 28139 Message: 28168

(LONG)ppppppppppppppppppppppppppppppppppppppppppppppppppp
Hello Hue,

I accept your challenge but must mention some "gotcha's".

Gotch #1 - I am presently building a "model" regen radio for my little friend, Jaxon. He lives next door, and is (just) 7 years old. I have to finish this project before I start another project. That's top priority.

Gotcha #2. I would like to make this exercise more instructive than a simple exercise in "OK, I did it - your idea worked." I want to understand the contradiction between your observation and Tom Lee's point. I'm quite sure both observations are reliable, and I need to understand why. I have three types of headphones here. (a) Australian military high-Z, WWII vintage. (b) some ex ABC (Australian Broadcasting Commission) hi-Z phones from who-knows-when. (b) some ex US army 'phones, probably ex some fighter aircraft (they have a VERY short lead). Identifiable (when/if I can find them).

I propose I set about discovering AND DOCUMENTING the lowest practical signal level my ears will hear using these phones. While there will be some subjectivity here (I'm the subject) I think the pico-watt sensitivity of these (and the working impedance) will be of some interest to every-one here.

Oh, I can also "mimic" your high-Z piezo 'phones by adding a JFET circuit in front of my old, moth-eaten (but much loved) headphones.

Gotcha #3. I have some modern lo-Z stereo phones, presumably 32 ohm working "Z". For these I say "as above". Except I'll drive them from an opAmp and just measure the working voltage.

Gotcha #4. To get real value from this experiment (and this is the hard part) I must measure the working "Z" for my aerial system and know the working "Z" for the 'phones. For the last item - easily done. For the aerial (and the detector), not so easily done. I have very little calibrated, sensitive test gear here. Some thought and care will be necessary.

I'm confident this test (or these tests) will demonstrate the accuracy of your observation. I think you have more experience with this vintage gear than me - but that doesn't worry me. If I do this experiment well, I'll learn something. But I don't intend to stop when I say, "OK, you're right." I happen to know that standard AC circuit theory works; and I think the first part of the experiment should measure the input and output impedances. Knowing this I should be able to make some prediction about the relative improvement gained (for example) by a full wave bridge detector, or a voltage doubling detector when compared with a common 1/2 wave detector.

So, we will need to do a little work setting up the experiment. We will need to choose the type of diode (and so on). I suggest we do that privately, by e-mail. After that we can post the results here, in the Regenrx "files". I should write an informal "hobby-style" report, such as you would see in a good quality magazine such as Ham Radio.

Les

About my version of Don's "slugsorb" reciever.

The idea is a simple radio that a boy can copy. I may have gone a little overboard on this - "my" version is a 3 transistor adaption of Don's circuit. His radio has two transistors. Three transistors may be a little too complicated for a 7 year old. More on that in a moment.

Construction: Wooden breadboard, with nails and wire.

My set is the "model" that Jaxon will copy. I used a layout that mimics the circuit diagram. I have an extra problem. Jaxon's sister (Emily) is jealous that Jaxon is building this modern marvel, and suggested she should build one too. So this project may take a week or so longer than my first plan proposed. That's life.

The extra transistor: I chose to add an extra transistor so it will work with modern lo-Z ear-buds, or common amplified speakers. I suspect that amplified speakers need 50 to 100 mV drive; but that's only a guess. At any rate they will have an input "Z" (I guess) of about 5k ohms. Again, I don't know, I've never seen a figure on this. That's the function of the extra transistor.

I want Jaxon to understand that things that work must be planned. I want Jaxon to understand that if he does "things" with his radio (like connecting the battery in reverse) it will stop working. I want Jaxon to have the fun of taking his radio to school and showing it in "show and tell". (I hope it comes back in a working condition!!). For a young man, this is part of the excitement of growing up. I think that's the experience of just about every-one on the RegenRx list.

PPS. Hue, I will write to your "cargo-kult" address!!

28169. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-21 03:46:54 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28169

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Blue Grass Radio/SDR Quadrature Detector/SDR-Radio.asc
Uploaded by : bluegrass_radio <danieljackson@...>
Description : SDR Radio Simulation

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Blue%20Grass%20Radio/SDR%20Quadrature%20
Detector/SDR-Radio.asc

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

bluegrass_radio <danieljackson@...>

28170. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-21 03:47:39 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28170

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Blue Grass Radio/SDR Quadrature Detector/SDR Radio Simulation
Uploaded by : bluegrass_radio <danieljackson@...>
Description : Brief Description of LTSpice File.

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Blue%20Grass%20Radio/SDR%20Quadrature%20
Detector/SDR%20Radio%20Simulation

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

bluegrass_radio <danieljackson@...>

28171. RE: [regenrx] Re: Bumblebees, theory and practice.

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-21 04:21:33 UTC
From: Hubert Miller
Topic: 28139 Message: 28171

Les, wonderful !
Now, last things first. Why not downsize the youngster's project to 2 transistors? If you're using 32 ohm headphones, you still might be able to get useful output without a emitter follower circuit. Or even one transistor, if you buy yourself some of those little piezo earpiece things. Not very expensive at all.
For your local broadcast, one transistor would suffice. I think I might almost tend to go to a 2-transistor vhf superregen for the FM band, because that's maybe what young people are more interested in listening to. You do have to pay a lot more attention to parts and wire placement, though.

The US military headphones, see if they're marked something like AN-HB-1. You may be able to look up the impedance of all 3 with some online searching.
I believe the U.S. ones are 600 ohms.
Use any diode you find worthwhile. I don't think you need any advice from me at all. The antenna characteristics will be difficult unless you have some kind of impedance or antenna analyzer. I understand you want numerics but you don't really need them. I look forward to learning what your results are.
I have tailored my proposition to this: Use as high impedance headphones as you can find. Employ an input circuit that does a reasonably good job of connecting the antenna to the rest of the circuit. Then compare the half wave and fullwave voltage doubler and see if it adds to the output. I don't wish to tell you how to devise the tuned circuit and its matching capability. I will just repeat that in the real world, I found that a circuit similar to Heath's CR-1 and the Mackay Radio (ship radio emergency crystal receiver) very effective, much better than a tapped coil or capacitive divider. Some of the crystal radio designs out there just miss the boat for maximizing power. Like the one-size-fits-all input coil winding, or the variable capacitor to the top of the tuned circuit – hogwash, unless you want to cut down loading on the tuned circuit and so boost selectivity. My goal in my little set was simply to develop as much output as possible without going to the extremes. Actually, in crystal radios, volume is cheap, selectivity is harder to get.
Not at all that it's a big deal, but I might draw up my little circuit and give it to Rob to post. I think my notes on it are perhaps of more interest than the actual circuit.

One thing I been thinking about – again ! – is how to combine maximized power and micropower components to get actual gain in a passive receiver.
I have seen numerous circuits for this, some even claiming enough gain for a signal-powered regen, but for this they always have seemed to have a really good antenna and strong input signals. Many years ago I played with "enhanced detectors" using high current gain Ge transistors and I thought I actually had something, but didn't pursue it long enough to get a repeatable recipe.
-Hue

28172. Re: [regenrx] Re: Bumblebees, theory and practice. high impedance headphones

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-21 04:37:34 UTC
From: Rob
Topic: 28139 Message: 28172

DRAW DRAW DRAW DRAW DRAW DRAW DRAW DRAW

hint

DRAW

I have collected all the parts ..... and high impedance headphones....
to put together whatever you draw.

On 05/21/2017 12:21 AM, Hubert Miller kargo_cult@... [regenrx] wrote:
>
> Les, wonderful !
>
> Now, last things first. Why not downsize the youngster's project to 2
> transistors? If you're using 32 ohm headphones, you still might be
> able to get useful
>
> output without a emitter follower circuit. Or even one transistor, if
> you buy yourself some of those little piezo earpiece things. Not very
> expensive at all.
>
> For your local broadcast, one transistor would suffice. I think I
> might almost tend to go to a 2-transistor vhf superregen for the FM
> band, because that's
>
> maybe what young people are more interested in listening to. You do
> have to pay a lot more attention to parts and wire placement, though.
>
> The US military headphones, see if they're marked something like
> AN-HB-1. You may be able to look up the impedance of all 3 with some
> online searching.
>
> I believe the U.S. ones are 600 ohms.
>
> Use any diode you find worthwhile. I don't think you need any advice
> from me at all. The antenna characteristics will be difficult unless
> you have some
>
> kind of impedance or antenna analyzer. I understand you want numerics
> but you don't really need them. I look forward to learning what your
> results are.
>
> I have tailored my proposition to this: Use as high impedance
> headphones as you can find. Employ an input circuit that does a
> reasonably good job of

>
> connecting the antenna to the rest of the circuit. Then compare the
> half wave and fullwave voltage doubler and see if it adds to the
> output. I don't wish
>
> to tell you how to devise the tuned circuit and its matching
> capability. I will just repeat that in the real world, I found that a
> circuit similar to Heath's CR-1
>
> and the Mackay Radio (ship radio emergency crystal receiver) very
> effective, much better than a tapped coil or capacitive divider. Some
> of the crystal
>
> radio designs out there just miss the boat for maximizing power. Like
> the one-size-fits-all input coil winding, or the variable capacitor to
> the top of the
>
> tuned circuit – hogwash, unless you want to cut down loading on the
> tuned circuit and so boost selectivity. My goal in my little set was
> simply to develop
>
> as much output as possible without going to the extremes. Actually, in
> crystal radios, volume is cheap, selectivity is harder to get.
> Not at all that it's a big deal, but I might draw up my little circuit
> and give it to Rob to post. I think my notes on it are perhaps of more
> interest than the
>
> actual circuit.
>
> One thing I been thinking about – again ! – is how to combine
> maximized power and micropower components to get actual gain in a
> passive receiver.
>
> I have seen numerous circuits for this, some even claiming enough gain
> for a signal-powered regen, but for this they always have seemed to
> have a
>
> really good antenna and strong input signals. Many years ago I played
> with "enhanced detectors" using high current gain Ge transistors and I
> thought
>
> I actually had something, but didn't pursue it long enough to get a
> repeatable recipe.
>
> -Hue
>
>

28173. Re: Bumblebees, theory and practice.

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-22 16:50:13 UTC
From: les.au49@...
Topic: 28139 Message: 28173

Sorry about the string of characters following (LONG).
I put some papers on the keyboard, then pressed "send". - Les

28174. Regenerative IF stage question

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-23 00:21:18 UTC
From: Hubert Miller
Topic: 28174 Message: 28174

I have a question for people who have used a positive-feedback and control scheme like this -

1. regenerative IF stage, using pentode valve with suppressor grid raised above RF ground, such as Halli SX-140 and Knight 'Star Roamer', or

2. regenerative IF stage, with valve cathode raised above ground by an RF choke, and a pot parallel the choke for adjustable bypass;
the regenerative IF scheme used in the old Frank Jones radio manuals.

3. tapped coil regenerative stage, with a pot from the coil tap to ground, to control regeneration; has appeared in some regenerative receiver
project articles. Probably nothing remarkable about this method either for positive or negative.

I am interested in user experience with these 3 schemes, most particularly in how "smooth" advancing the regeneration into full oscillation
proceeds, and maybe if any stability problems. I am thinking of adding a slight modification to a TRF HF receiver which needs better selectivity
to be practically usable, and to do this with minimum modification. Using one of the first two schemes above. thanks- Hue

28175. Re: Regenerative IF stage question

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-23 02:50:10 UTC
From: les.au49@...
Topic: 28174 Message: 28175

Hello Hue,
Can't answer your specific question (since it relates to I.F.) BUT ...

Following Arnie Coro's advice I tried the regenerative Hartley detector with a varying voltage on the screen grid.

Tube: 6AK5.
Regen control: Pot in the screen grid line.
Method of feed-back: Tapped coil, per Hartley detector. (Said that before).
Effectiveness: Very smooth control. Between oscillation (12 volts) and no oscillation (9 volts).
using a 20k pot. BUT take note: My B+ supply is only 36 volts on this receiver.

I have one of those (very very expensive) Hallicrafters S-38 receivers (original, no model letter).
I intend adding a "Q" multiplier to this set.

There is a regen detector (solid state) with a very effective "Q" multiplier (one transistor taps onto the "grid" of the JFET detector via 33pF cap). This would be a "nice" way to add regeneration to ANY simple set. I plan to do this to my (very very expensive) S-38. (Original - no model letter!!!)

Les

28176. Re: Regenerative IF stage question

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-23 14:17:59 UTC
From: dawmast@...
Topic: 28174 Message: 28176

"There is a regen detector (solid state) with a very effective "Q" multiplier (one transistor taps onto the "grid" of the JFET detector via 33pF cap). This would be a "nice" way to add regeneration to ANY simple set. I plan to do this to my (very very expensive) S-38. (Original - no model letter!!!)"

Would you like to put a circuit diagram of this regenerative receiver here?

28177. The "Two Dollar" regen

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-23 21:58:33 UTC
From: Phil
Topic: 28177 Message: 28177

Hi,

I was prowling around the NORCAL QRP web site and ran across the
following PDF file. Perhaps it has been mentioned here in the past
before I joined the group. If so please forgive the repeat.

I read the article, while it doesn't look like it'd be an expensive
project, I don't think you could build it for $2.00 unless you had a
well equipped junkbox. See it here. . .

http://www.norcalqrp.org/files/TheTwoDollarregenforQRPp.pdf

--
73 de Phil, KO6BB.
Specializing in DXing NDBs (Longwave Beacons).

Location: "The Beaconeer's Lair".
Merced, Central California, 37,18,37N 120,30,6W CM97rh
http://www.qsl.net/ko6bb/

HF/LF RADIOS:
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
PORTABLES: Realistic DX380, Grundig G6 Aviator, Grundig S450DLX
Icom: IC-7200 Xceiver, DSP IF & filters (~2015).
Kenwood: TS-450SAT Xceiver, cascaded 250/125Hz Inrad filters.
SDR: Softrock Ensemble II LF (built from a kit 2017).

ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 4 Port Antenna Multicoupler, Feeds 4 RX's.
AF Filters: Timewave DSP-599zx & HOMEBREW 8 Hz Filter.

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.
Cushcraft AR-10 Ringo at 14 feet AGL.

28178. RE: [regenrx] The "Two Dollar" regen

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-23 22:02:15 UTC
From: Hubert Miller
Topic: 28177 Message: 28178

Ah, a use finally for those old 741's in the parts box.
-H

I was prowling around the NORCAL QRP web site and ran across the following PDF file. Perhaps it has been mentioned here in the past before I joined the group. If so please forgive the repeat.

I read the article, while it doesn't look like it'd be an expensive project, I don't think you could build it for $2.00 unless you had a well equipped junkbox. See it here. . .

http://www.norcalqrp.org/files/TheTwoDollarregenforQRPp.pdf

--
73 de Phil, KO6BB.

28179. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-24 08:59:58 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28179

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Blue Grass Radio/Dual-Gate-QSD.asc
Uploaded by : bluegrass_radio <danieljackson@...>
Description : How I create a dual gate mixer for SDR QSD detectors.

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Blue%20Grass%20Radio/Dual-Gate-QSD.asc

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

bluegrass_radio <danieljackson@...>

28180. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-24 09:00:54 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28180

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Blue Grass Radio/Dual-Gate-QSD=v2.asc
Uploaded by : bluegrass_radio <danieljackson@...>
Description : Here the dual gate mixer is combined with a Dual D flip flop 90 degree phase splitter for I and Q demodulation.

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Blue%20Grass%20Radio/Dual-Gate-QSD%3Dv2.asc

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

bluegrass_radio <danieljackson@...>

28181. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-24 09:02:32 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28181

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Blue Grass Radio/Amateur-Home-Brew-SDR.asc
Uploaded by : bluegrass_radio <danieljackson@...>
Description : This is my unique home brew SDR amateur radio receiver which covers the HF amateur bands. This concept is simple enough using standard DIP IC chips and J310 JFET transistors. I need to publish some notes on this circuit since there are adjustments you must make when selecting the bands.

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Blue%20Grass%20Radio/Amateur-Home-Brew-SDR.asc

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

bluegrass_radio <danieljackson@...>

28182. Re: Question: high-gain broadband RF amp between Q-multiplier and detector?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-24 10:53:23 UTC
From: dawmast@...
Topic: 21752 Message: 28182

"I'm thinking about the following design: Q multiplier, followed by a low-input-Z, high-gain, broadband RF amp connected to a low-impedance point on the tank (through a capacitive divider). The output of the high-gain RF amp then goes to a common-emitter BJT biased to serve as a detector.

Why all the complexity? Because a separate BJT detector stage has such a low input impedance (~2k at 30 MHz, according to simulations) that it should not be connected to the top of the tank, and connecting the BJT detector to a low-impedance point at the tank yields such low signal voltages that efficient AM detection is not possible (according to simulations with microvolt-level signals at the tank). So, why not use a high-gain, broadband RF amp between the Q multiplier and the detector to boost the low tank voltages (taken from a low-impedance tapping point) up to a high level for efficient detection?"

Dear QRP.Gaijin, have you already got a circuit diagram of this receiver and would you like to post it here?

28183. Re: Question: high-gain broadband RF amp between Q-multiplier and detector?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-24 12:38:50 UTC
From: qrp.gaijin@...
Topic: 21752 Message: 28183

Hi drm1173,

Thanks for your interest. Unfortunately no I did not (yet) complete this regenerative receiver with broadband RF amplification before the detector. Instead, I am now thinking that a more interesting way to achieve this goal is with two regenerative stages -- the first one acts as a Q-multiplier to boost the RF signal (maybe by up to 40 dB?), and the second regenerative stage actually acts as the detector (changing RF to audio). I think this is the same idea used in the "Cascade Regenerative Receiver" by WD5HOH.

Furthermore, I will probably try this idea in a superhet. In other words, I plan to have a frequency converter to convert shortwave signals to 2 MHz. Then, I will have one 2 MHz Q-multipler followed by a separate 2 MHz regenerative detector. The signal boost from the first Q-multiplier should make the second regenerative detector quite sensitive. Furthermore, the first Q-multiplier should be able to act as a simple AGC stage by using the detected AF voltage to pull down the Q-multiplier gain if the detected audio is too large.

Probably, the big challenge will be keeping the two regenerative stages isolated well enough to prevent bad interactions. I hope common-base buffers will be enough. If I succeed with this idea I will report on it.

Best regards,

qrp.gaijin@yahoo.com
http://qrp-gaijin.blogspot.com http://qrp-gaijin.blogspot.com

---In regenrx@yahoogroups.com, <dawmast@...> wrote :

"I'm thinking about the following design: Q multiplier, followed by a low-input-Z, high-gain, broadband RF amp connected to a low-impedance point on the tank (through a capacitive divider). The output of the high-gain RF amp then goes to a common-emitter BJT biased to serve as a detector.

Why all the complexity? Because a separate BJT detector stage has such a low input impedance (~2k at 30 MHz, according to simulations) that it should not be connected to the top of the tank, and connecting the BJT detector to a low-impedance point at the tank yields such low signal voltages that efficient AM detection is not possible (according to simulations with microvolt-level signals at the tank). So, why not use a high-gain, broadband RF amp between the Q multiplier and the detector to boost the low tank voltages (taken from a low-impedance tapping point) up to a high level for efficient detection?"

Dear QRP.Gaijin, have you already got a circuit diagram of this receiver and would you like to post it here?

28184. Re: Question: high-gain broadband RF amp between Q-multiplier and detector?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-24 12:59:42 UTC
From: dawmast@...
Topic: 21752 Message: 28184

Dear QRP.Gaijin,

Have you already tried my version of a regenerative receiver with an interim amplifier stage between Q-Multiplier and detector? See circuit diagram below. It is also described at
http://theradioboard.com/rb/viewtopic.php?f=4&t=7543
http://theradioboard.com/rb/viewtopic.php?f=4&t=7543

https://www.uploadarchief.net/files/download/regeninterimamp.gif
https://www.uploadarchief.net/files/download/regeninterimamp.gif

28185. Re: [regenrx] Re: Question: high-gain broadband RF amp between Q-multiplier and detector?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-24 12:52:32 UTC
From: Bill Cromwell
Topic: 21752 Message: 28185

Hi,

I think you will just overload that regenerative detector. Unless you use a diode mixer at frequencies higher than 20 meters you will have no need of "high amplification" ahead of a regenerative detector. I am a 40 meter ham and no rf amp has ever been desirable except for isolation from the antenna (no high gain amp) up through 14+ mc. That is regardless of the detector topology.

I think you will get better results using the inductors in the front end of your radio to accomplish impedance matching. If you suspect that you have some brand new, untried idea please build the hardware and let us know how it works. Enquiring minds want to know :)

73,

Bill KU8H

On 05/24/2017 08:38 AM, qrp.gaijin@... [regenrx] wrote:
>
> Hi drm1173,
>
>
> Thanks for your interest. Unfortunately no I did not (yet) complete
> this regenerative receiver with broadband RF amplification before the
> detector. Instead, I am now thinking that a more interesting way to
> achieve this goal is with two regenerative stages -- the first one
> acts as a Q-multiplier to boost the RF signal (maybe by up to 40 dB?),
> and the second regenerative stage actually acts as the detector
> (changing RF to audio). I think this is the same idea used in the
> "Cascade Regenerative Receiver" by WD5HOH.
>
> Furthermore, I will probably try this idea in a superhet. In other
> words, I plan to have a frequency converter to convert shortwave
> signals to 2 MHz. Then, I will have one 2 MHz Q-multipler followed by
> a separate 2 MHz regenerative detector. The signal boost from the
> first Q-multiplier should make the second regenerative detector quite
> sensitive. Furthermore, the first Q-multiplier should be able to act
> as a simple AGC stage by using the detected AF voltage to pull down
> the Q-multiplier gain if the detected audio is too large.
>
> Probably, the big challenge will be keeping the two regenerative
> stages isolated well enough to prevent bad interactions. I hope
> common-base buffers will be enough. If I succeed with this idea I will
> report on it.

>
> Best regards,
>
> qrp.gaijin@...
> http://qrp-gaijin.blogspot.com
>
>
>
> ---In regenrx@yahoogroups.com, <dawmast@...> wrote :
>
> "I'm thinking about the following design: Q multiplier, followed by a
> low-input-Z, high-gain, broadband RF amp connected to a low-impedance
> point on the tank (through a capacitive divider). The output of the
> high-gain RF amp then goes to a common-emitter BJT biased to serve as
> a detector.
>
>
> Why all the complexity? Because a separate BJT detector stage has such
> a low input impedance (~2k at 30 MHz, according to simulations) that
> it should not be connected to the top of the tank, and connecting the
> BJT detector to a low-impedance point at the tank yields such low
> signal voltages that efficient AM detection is not possible (according
> to simulations with microvolt-level signals at the tank). So, why not
> use a high-gain, broadband RF amp between the Q multiplier and the
> detector to boost the low tank voltages (taken from a low-impedance
> tapping point) up to a high level for efficient detection?"
>
>
> Dear QRP.Gaijin, have you already got a circuit diagram of this
> receiver and would you like to post it here?
>
>

--
bark less - wag more

28186. Re: [regenrx] Re: Question: high-gain broadband RF amp between Q-multiplier and detector?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-24 13:17:16 UTC
From: qrp.gaijin@...
Topic: 21752 Message: 28186

Hi,

I plan on using tiny ferrite rod antenna (about the size of an AAA cell) with no external antenna. So, signals will be much weaker in my set than in a set with a proper antenna. Surprisingly, this tiny ferrite rod works fine for shortwave reception in the evening when wired into a normal regen. But in the daytime, signals are much weaker, which is why I think some RF amplification ahead of the detector will be useful -- with extremely low signal levels, square law detection works against us.. AGC is then useful to account for the vast differences in signal strength between day and night.

Best regards,

qrp.gaijin@yahoo.com
http://qrp-gaijin.blogspot.com http://qrp-gaijin.blogspot.com

28187. Re: [regenrx] Radio Shack "Globe Patrol" review ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-25 07:06:03 UTC
From: kevin asato
Topic: 28135 Message: 28187

Well, yeah. it did all of what you state. However, i had fun with mine as it was my entry into SWL and DX. In addition to achieving WATVS (worked all tv sets) in the neighborhood, i was able to hear quite a few SWL and amateur stations with a bedroom mounted dipole cut for 11M (CB) and fed with twin lead. Also managed to connect onto my TV antenna (versus the main one for my parent's house) and heard quite a few more things. The regenerative set taught me how to tune a station to receive CW and SSB. I had managed to tinker the receiver to death by changing components and seeing what happened. My entry into RF electronics. Kind of wish i still had the receiver as it seems more capable than some of the portable commercial radios i possess today.
73,
kevin
kc6pob

I wonder if anyone here has used
the Radio Shack "Globe Patrol" radio. I just
batteried up one I bought at a swap.
I am kind of underimpressed. I
don't know if it always worked like this or some parts
have degraded or changed value.

I find the regen control the opposite of smooth; I'd
call it "abrupt", the fiddly way that gave
regenerative radios a bad

name in their later kit years. It
also seems to have quite a bit of sensitivity to hand
capacitance on tuning. I will have

another go at it after dark; not
much on now. Of course at this price level there was no
reduction gearing on the main
tune or bandspread controls, so
probably much of my unhappiness comes from comparing it to
tuning an ex-military
regen set. This example seems to
very neatly built, but I note the main tuning is a poly
type, low Q, and the bandspread
cap looks really low quality, very
chintzy.

Maybe later I'll have a look
at the schematic and see if there's room for
improvement, at least in the critical

regenerative RF stage. Should be
at least possible to improve that gain action in the regen
stage.

-Hue

28188. A tiny ferrite rod antenna at shortwave

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-25 10:21:57 UTC
From: qrp.gaijin@...
Topic: 28188 Message: 28188

Hi,

I recently built a shortwave regen with a tiny ferrite rod antenna (type "SL-45GT" for AM BCB use) as the tank coil. The reception was surprisingly good for such a tiny antenna that was not even designed for use at shortwave. Here are some low-quality videos to give a rough idea of the signal levels possible with the tiny ferrite rod antenna at shortwave (around 7 MHz).

https://www.youtube.com/watch?v=KyAlpqw-fGM&feature=youtu.be
https://www.youtube.com/watch?v=KyAlpqw-fGM&feature=youtu.be

https://www.youtube.com/watch?v=eENrSUPxg1M&feature=youtu.be
https://www.youtube.com/watch?v=eENrSUPxg1M&feature=youtu.be

Note however these signal levels are in early evening. In the daytime, signal levels are unfortunately much weaker.

I may dismantle this receiver soon (trying to convert it into a superhet), but I thought it was worth preserving a video of its performance. Sorry for the low-quality video -- I was recording directly from the crystal earphone.

Best regards,

qrp.gaijin@yahoo.com
http://qrp-gaijin.blogspot.com http://qrp-gaijin.blogspot.com

28189. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-25 12:40:11 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28189

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /IMG_2688.JPG
Uploaded by : jorschei <kthkit@...>
Description : KHT rf-Design; Reflex receiver for 7 and 14 MHz under contruction

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/IMG_2688.JPG

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

jorschei <kthkit@...>

28190. Re: New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-25 13:23:42 UTC
From: dawmast@...
Topic: 89 Message: 28190

Is there any circuit diagram of that KTH regenerative reflex receiver?

28191. Re: [regenrx] A tiny ferrite rod antenna at shortwave

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-25 14:37:08 UTC
From: Rob
Topic: 28188 Message: 28191

Please share a picture of the schematic.

On 05/25/2017 06:21 AM, qrp.gaijin@... [regenrx] wrote:
>
> Hi,
>
>
> I recently built a shortwave regen with a tiny ferrite rod antenna
> (type "SL-45GT" for AM BCB use) as the tank coil. The reception was
> surprisingly good for such a tiny antenna that was not even designed
> for use at shortwave. Here are some low-quality videos to give a rough
> idea of the signal levels possible with the tiny ferrite rod antenna
> at shortwave (around 7 MHz).
>
>
> https://www.youtube.com/watch?v=KyAlpqw-fGM&feature=youtu.be
>
> https://www.youtube.com/watch?v=eENrSUPxg1M&feature=youtu.be
>
>
> Note however these signal levels are in early evening. In the daytime,
> signa l levels are unfortunately much weaker.
>
>
> I may dismantle this receiver soon (trying to convert it into a
> superhet), but I thought it was worth preserving a video of its
> performance. Sorry for the low-quality video -- I was recording
> directly from the crystal earphone.
>
>
> Best regards,
>
>
> qrp.gaijin@...
>
> http://qrp-gaijin.blogspot.com
>
>
>

28192. Re: [regenrx] A tiny ferrite rod antenna at shortwave

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-25 17:20:24 UTC
From: zlatko vidlanović
Topic: 28188 Message: 28192

yes
where is schematic of this receiver ?

2017-05-25 16:37 GMT+02:00, Rob roomberg@... [regenrx]
<regenrx@yahoogroups.com>:
> Please share a picture of the schematic.
>
> On 05/25/2017 06:21 AM, qrp.gaijin@... [regenrx] wrote:
>>
>> Hi,
>>
>>
>> I recently built a shortwave regen with a tiny ferrite rod antenna
>> (type "SL-45GT" for AM BCB use) as the tank coil. The reception was
>> surprisingly good for such a tiny antenna that was not even designed
>> for use at shortwave. Here are some low-quality videos to give a rough
>> idea of the signal levels possible with the tiny ferrite rod antenna
>> at shortwave (around 7 MHz).
>>
>>
>> https://www.youtube.com/watch?v=KyAlpqw-fGM&feature=youtu.be
>>
>> https://www.youtube.com/watch?v=eENrSUPxg1M&feature=youtu.be
>>
>>
>> Note however these signal levels are in early evening. In the daytime,
>> signa l levels are unfortunately much weaker.
>>
>>
>> I may dismantle this receiver soon (trying to convert it into a
>> superhet), but I thought it was worth preserving a video of its
>> performance. Sorry for the low-quality video -- I was recording
>> directly from the crystal earphone.
>>
>>
>> Best regards,
>>
>>
>> qrp.gaijin@...
>>
>> http://qrp-gaijin.blogspot.com
>>
>>
>>
>

>

28193. Re: Regenerative IF stage question

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-26 10:35:43 UTC
From: les.au49@...
Topic: 28174 Message: 28193

For the circuit see RegenRx files.
Look in the folder: Solid State Regen Ccts
The file is: TRF Regen Rx, with FET det & 'Q' multiplier.
The detector is either MPF102 or 2N3819.
The "Q" multiplier is PN2222 bipolar transistor.

Hope this helps.

Les

28194. Re: Regenerative IF stage question

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-26 12:12:55 UTC
From: dawmast@...
Topic: 28174 Message: 28194

Here I have another regenerative receiver based upon a Q-Multiplier with a FET T2 and a separated BJT detector stage T4 in which a source follower buffer stage T3 has been inserted between tank circuit and detector. This emitter follower detector T4 has a good AF quality. T5 is a current source which sets the standing current through T3.

https://www.uploadarchief.net/files/download/modifiedbeast-02regen.gif
https://www.uploadarchief.net/files/download/modifiedbeast-02regen.gif

https://www.uploadarchief.net/files/download/modifiedbeast-02regen.gif

https://www.uploadarchief.net/files/download/modifiedbea...
https://www.uploadarchief.net/files/download/modifiedbeast-02regen.gif

View on www.uploadarchief.net
https://www.uploadarchief.net/files/download/modifiedbeast-02regen.gif
Preview by Yahoo

28195. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-26 13:35:38 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28195

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /S-1016-02 3.6 - 7 MHz REGEN REFLEX ONTV SCH.GIF
Uploaded by : jorschei <kthkit@...>
Description : This is a older T
KTH Fet regen Traveller2 RX built is the basis for the Wearable under constuction RX. Bud
the detector is replaced with a ceramic regen detector.

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/S-1016-02%20%203.6%20-%207%20MHz%20REGEN
%20%20%20REFLEX%20%20ONTV%20SCH.GIF

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

jorschei <kthkit@...>

28196. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-26 13:41:26 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28196

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /s-1003 3.6 - 7 MHz REGEN 2 ONTV.BMP
Uploaded by : jorschei <kthkit@...>
Description : This is a older KTH Fet regen RX built and basis for the Wearable.
The detector is replaced with a ceramic resonator and polyvaricon capacitor tuning.

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/s-1003%203.6%20-%207%20MHz%20REGEN%202%20ONTV.BMP

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

jorschei <kthkit@...>

28197. Re: [regenrx] A tiny ferrite rod antenna at shortwave

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-26 13:44:12 UTC
From: astongoldsmith@...
Topic: 28188 Message: 28197
Attachments: 1 described; binary payloads are missing from this source WARC

hi qrp gai jin

is your schematic published on TheRadiBoard forum?

28198. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-26 13:44:53 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28198

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /S-6204-05 TEST X-TAL VCXO SCHEMATIC 2.BMP
Uploaded by : jorschei <kthkit@...>
Description : This KTH VXO is converted for use as a regen detector bud has still to be tested in the TRAVELLER 8 reflex receiver

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/S-6204-05%20%20TEST%20X-TAL%20VCXO%20SCHEMATIC%202.BMP

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

jorschei <kthkit@...>

28199. Re: New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-26 14:03:09 UTC
From: dawmast@...
Topic: 89 Message: 28199

When I wanto axcess that file at https://groups.yahoo.com/neo/groups/regenrx/files/S-1016-02 3.6 - 7 MHz REGEN REFLEX ONTV SCH.GIF I get an error message: "Oops! Invalid path".

I think that something has gone wrong, where can I find the right link for this file?

28200. Re: [regenrx] Re: New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-26 19:20:46 UTC
From: zlatko vidlanović
Topic: 89 Message: 28200

Hi DrM
and nice to see you,as you know my account on TheRadioBoard is deleted
i still don't know why ,probably because i say something wrong against
Selenium...
anyway yes this link not work.

by the way my new forum is on :
http://euradioboard.createmybb3.com/
feel free and post some of your well known design
all best

2017-05-26 16:03 GMT+02:00, dawmast@... [regenrx] <regenrx@yahoogroups.com>:
> When I wanto axcess that file at
> https://groups.yahoo.com/neo/groups/regenrx/files/S-1016-02 3.6 - 7 MHz
> REGEN REFLEX ONTV SCH.GIF I get an error message: "Oops! Invalid path".
>
> I think that something has gone wrong, where can I find the right link for
> this file?

28201. Re: A tiny ferrite rod antenna at shortwave

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-25 12:34:23 UTC
From: kthkit@...
Topic: 28188 Message: 28201

Hi Gaijin,

Nice reflex receiver experiment. This type of receivers can be ferry sensitive.
AM antenna rods has a initial Mu of aprox 120 bud the RF loss will increase a lot at higher frequency. An option is to use a ferrite rod from an old PAGER receiver (tell you there is telephone for you) they has been working on 70 MHz and those rod’s has a low loss factor up to 70MHz. And a Mu-initial of aprox 40..
It should be possible to cover the reflex in the higher SW band 14Mhz..or higher.

In the KTH-rf Design files a photo of an experimental reflex receiver based on 2xBF1105 FET’s and 1xTDA7050 lf amplifier under construction. Important is to build it in an aluminium box prohibit hand affect.
The detector is ceramic tuned by a Polyvaricap
All in SMT and working on 3.3 volt. Should be wearable 45X45 mm size.
It is fun to do these experiments. Have still to complete and test it.

73”Joris

28202. Re: [regenrx] Re: New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-26 17:22:47 UTC
From: J van Scheindelen
Topic: 89 Message: 28202

Go to the files section S-6203-3.6 KTH number.

From: dawmast@... [regenrx]
Sent: Friday, May 26, 2017 4:03 PM
To: regenrx@yahoogroups.com
Subject: [regenrx] Re: New file uploaded to regenrx

When I wanto axcess that file at
https://groups.yahoo.com/neo/groups/regenrx/files/S-1016-02 3.6 - 7 MHz REGEN REFLEX ONTV SCH.GIF I get an error message: "Oops! Invalid path".

I think that something has gone wrong, where can I find the right link for this file?

28203. Re: [regenrx] Re: New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-27 07:43:08 UTC
From: dawmast@...
Topic: 89 Message: 28203

Can you still register at the RadioBoard by using an other name and an other email adres? Accounts are usually deleted on webfora like the RadioBoard when members are using rude and vulgar language and are calling names to other members.

28204. Re: [regenrx] Re: New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-27 14:20:47 UTC
From: zlatko vidlanović
Topic: 89 Message: 28204

hi DrM
first...thanks for reply
Like you probably know in one old topic
Selenium started to share your arogant observation on my circuit
then i said to him that is better to keep his knowlege for himsels
then when i come second day on forum my account was baned,then after few
days was deleted,i have tried to create account with my yahho email but
it seems that is blocked because i dont receive approval.
sorry if i bothering you with all this .

2017-05-27 9:43 GMT+02:00, dawmast@... [regenrx] <regenrx@yahoogroups.com>:
> Can you still register at the RadioBoard by using an other name and an other
> email adres? Accounts are usually deleted on webfora like the RadioBoard
> when members are using rude and vulgar language and are calling names to
> other members.

28205. Re: [regenrx] Re: New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-27 16:42:30 UTC
From: dawmast@...
Topic: 89 Message: 28205

Where is that particular topic on The Radioboard?

28206. Obituary(s) To A Filter Cap And A 6X4 Rectifier Tube

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-27 20:13:01 UTC
From: Sam Neal
Topic: 28206 Message: 28206

Hello,

I sadly report the passing of two QRP radio transmitter components.

(#1) Passing (Suddenly!) of a 22 mFd/450 Volts DC Filter capacitor.

Born approximately 2007 in China (The People's Republic There-of)

Passed (suddenly) just before the 4 States QRP Group Net, 0130 Z - 7122 kHz
-
24 May, 2017 at 01:15:05Z

Born in People's Republic of China to operate continually at 450 VDC.
Passed suddenly and in a spectacular manor while operating at approximately
380 VDC

We also sadly report the associated passing of two 1 Ampere fuses and one 6X5
Tube.

(#2) Suddenly, 01:15:06 Z one 6X5GT/G CHS/Jan rectifier tube.

6X5/GT/G/JAN/CHS served proudly during the World War 2 conflict assigned to
the United States Navy.
Two innocent 1 Ampere fuses lost their lives as a result of the above
incident.

Services will be This coming Wednesday by the P&H Garbage Pick-up Service
Company
Pall-bearers will be Cooter and Bubba.

Internment will be shortly there-afterwards at The Liberty County Texas
Landfill

==========

This is the first failure I have had with these small sized fiter caps. I
suggest operating these imports will below heir rated Voltage limits. The
above components were in the built-in power supply of a clone-kit of an Ameco
AC-1, with a Ken-Rad 6V6 tube as a crystal oscillator.

The transmitter was not being used when the filter cap failed, just minding
it's own business, awaiting net time.

The current rush took the 6X5/G/GT with it, and it's rolling off the desk top
and playing Humpty Dumpty didn't help it any at all. So far, no problems with
the replacement 22 mFd. 450 VDC cap.

All kidding aside, have any of you had problems with these type capacitors, operating well below their operating Voltage, failing? The value and Voltage ratings are well marked, but no manufacturer's info is shown. I either bought them in small lots off of E-Bay purchases, or the filter cap was supplied with the kit - I forget.

Due to failure with 50+ year old paper filter caps in older boat anchor rigs, I routinely replace the filter caps and also add a fuse before ever transmitting the first dot with them. I had hoped that operating well below it's Voltage rating would help, but it didn't.

Any comments on similar incidents would be appreciated.

73,

Sam Neal N5AF

Celebrating 60 Years In Amateur Radio

28207. RE: [regenrx] Obituary(s) To A Filter Cap And A 6X4 Rectifier Tube

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-27 20:24:37 UTC
From: Hubert Miller
Topic: 28206 Message: 28207

Sam, what was the name of the kit?
-Hue

28208. Re: Obituary(s) To A Filter Cap And A 6X4 Rectifier Tube

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-27 21:02:11 UTC
From: les.au49@...
Topic: 28206 Message: 28208

Sam, Every BA HV PSU (and lower voltage ones too) should have one fuse per rectifier/transformer phase winding. Not needed in the past; needed now.

Les

28209. Re: Two tubes (actually three) regenerative that provides very good reception from 500 kHz up to 25 mHz (tested) 150 volts DC and 6.3 volts AC

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-27 21:31:26 UTC
From: les.au49@...
Topic: 27987 Message: 28209

Good day Joe,

I strongly recommend NO-ONE builds a B+ supply without a power transformer.

This topic has been discussed many, many, many times, and a transformer-less power supply is dangerous.

Transformers are cheap (free if you care to look carefully), and with some imagination just about ANY transformer can be made to deliver 90-120V (or more) with an imaginative rectifier. More on this later.

Just about ANY regen receiver will work nicely from a 90V B+ supply.
The ARRL hand book has some very nice (simple) circuits running from a 48V B+ supply (look in any handbook from the 1940s).

Les

PS If you can find a 24V AC "wall-pack" supplying 500mA, build a 1/2 wave doubler or tripler and you'll have an inexpensive, effective power supply for any regen set you care to build. If you use x2 12V tubes and wire the filaments in series you will also have a heater supply for your set.)

28210. Re: [regenrx] Re: Two tubes (actually three) regenerative that provides very good reception from 500 kHz up to 25 mHz (tested) 150 volts DC and 6.3 volts AC

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-27 21:52:33 UTC
From: Sam Neal
Topic: 27987 Message: 28210

Hello,

I agree! Also, it only takes a few minutes to add a fuse/fuse holder - an excellent investment - considering my recent power supply filter cap failure where the fuse saved the transformer from destroying it's-self. The fuse saved the day for me.

73,

Sam Neal N5AF
Celebrating 60 Years In Amateur Radio

------ Original Message ------
Received: Sat, 27 May 2017 04:31:45 PM CDT
From: "les.au49@... [regenrx]" <regenrx@yahoogroups.com>
To: <regenrx@yahoogroups.com>
Subject: [regenrx] Re: Two tubes (actually three) regenerative that provides very good reception from 500 kHz up to 25 mHz (tested) 150 volts DC and 6.3 volts AC

Good day Joe,

I strongly recommend NO-ONE builds a B+ supply without a power transformer.

This topic has been discussed many, many, many times, and a transformer-less power supply is dangerous.

Transformers are cheap (free if you care to look carefully), and with some imagination just about ANY transformer can be made to deliver 90-120V (or more) with an imaginative rectifier. More on this later.

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Les

PS If you can find a 24V AC "wall-pack" supplying 500mA, build a 1/2 wave doubler or tripler and you'll have an inexpensive, effective power supply for any regen set you care to build. If you use x2 12V tubes and wire the filaments in series you will also have a heater supply for your set.)

28211. Re: [regenrx] Re: Two tubes (actually three) regenerative that provides very good reception from 500 kHz up to 25 mHz (tested) 150 volts DC and 6.3 volts AC

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-27 22:01:02 UTC
From: Sam Neal
Topic: 27987 Message: 28211

Hello,

You can easily get 90 - 120 VDC by snapping together the needed amount of 9 Volt transistor radio batteries.

Sam Neal N5AF
Celebrating 60 Years In Amateur Radio

Just about ANY regen receiver will work nicely from a 90V B+ supply.
The ARRL hand book has some very nice (simple) circuits running from a 48V B+ supply (look in any handbook from the 1940s).

28212. Re: [regenrx] Re: Two tubes (actually three) regenerative that provides very good reception from 500 kHz up to 25 mHz (tested) 150 volts DC and 6.3 volts AC

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-28 15:07:07 UTC
From: Bill Cromwell
Topic: 27987 Message: 28212

Hi Sam,

I often (always) run my "ARC5" command receivers on 90 volts worth (10 in series) of 9 volt batteries. The current draw wide open is about 15 mA. Most tube gear (high power TX amps excepted) are very happy with 90 volts. Some will run on B+ as low as 12 volts. I have not been masochistic enough to try that! One of my command receivers worked at 45 volts (5 X 9 volts batteries) at 8 mA current. But performance was noticeably *down*. Looking at tube specs and battery operated radios I think almost all tube can perform well at 45 volts B+ and existing gear can be modified for appropriate bias and screen voltage to do a good job on 45 volts B+. I do not care to modify my antique mil radios any more than they might already be.

I have used 20 of those batteries in series to get 180 volts B+. The battery pack can be clumsy to deal with but is manageable. I only did that as "proof of concept" A 'permanent' container should be built just for the purpose. There are some QRP tube transmitters built with tubes that use the 90 or 180 volt series battery packs that are practical to operate. Power levels are around about 1 watt of output. I am planning to build one and give it a go. I will be using "battery" tubes and three or four of those tubes can run a long while on a flashlight battery. I would only use the larger 180 volt battery pack to get longer operating time from a transmitter. The receiver operate for *weeks* at 90 volts. A qrp MOPA should draw less than 30 MA at 90 volts B+ and much less at 180 volts ~15 mA or less - for three tubes and CW. Less two tubes.

I see 9 volt batteries priced at 4 or 5 bucks each and I *never* buy those. It is expensive enough to buy them at a dollar each for alkaline batteries. I sometimes find for them under a dollar each.

So it seems that power supplies for tube radios do not *always* require a power transformer <sly grin>.

73,

Bill KU8H

On 05/27/2017 06:01 PM, 'Sam Neal' n5af@... [regenrx] wrote:
>
>
>
> Hello,
>

> You can easily get 90 - 120 VDC by snapping together the needed amount
> of 9
> Volt transistor radio batteries.
>
> Sam Neal N5AF
> Celebrating 60 Years In Amateur Radio
> ----------
>
> Just about ANY regen receiver will work nicely from a 90V B+ supply.
> The ARRL hand book has some very nice (simple) circuits running from a
> 48V B+
> supply (look in any handbook from the 1940s).
>
>

--
bark less - wag more

28213. Re: KITCHIN regen version 4

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-28 16:18:34 UTC
From: rabej_de@...
Topic: 28008 Message: 28213

Hi, group,

Rob (kb3by) obliged me by sending me a complete kit for his version of the little Kitchin regen receiver (http://www.learnmorsecode.com/regen/00regen.html http://www.learnmorsecode.com/regen/00regen.html).

Due to a public holiday on Thursday I was able to spend some time and fired up my soldering station.
I have taken some pictures which can be accessed via my own website at
http://www.k-code.de/images/Kitchin_regen.html
http://www.k-code.de/images/Kitchin_regen.html.

Rob very carefully prepared and wrapped the kit for me.
After I printed out a template for the circuit board layout, soldering didn't take longer than an hour.
All parts are of ordinary size, however, I had to use a magnifier due to being farsighted.

Now here's my problem : I can't seem to get the little receiver working.
It simply won't go into regeneration at all.

Since I planned to use it for the NDB-band (200 - 600 kHz) I thought it would be a good idea to first test it with the Coil and capacitor mentioned in Kitchin's document.

However - not working at all.
I swapped the ends of the tickler coil - did not help.
I checked all components incl. the correct assembly of the three electrolytic C's, transistors and diodes.
The receiver draws some 12.5 mA from a brand new 9V battery.

I have absolutely no idea what went wrong.

Would someone on the list be able to help where to start to search for the fault?

Thanks very much in advance.

73s

Joachim

28214. RE: [regenrx] Re: Two tubes

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-28 21:58:42 UTC
From: Hubert Miller
Topic: 28214 Message: 28214

30 mA is a pretty heavy load for the 9 volt batteries, isn't it? I think the average draw on
them in the old "pocket radios" they were intended for, was about 10 mA average, no?

I suppose since the mode would be CW the average drain would be much less so not so bad for their life. Still, being hit with a 30 mA draw is hard on them.

I suggest the dollar stores. You can get 2 for $1 there.
BTW, I bought some D-cell battery boxes recently to power up various things with 1.5 or 3 volts DC. There were some interesting looking ones that could snap together sideways or in series so you could get various voltages and current capacities, however the reviews of the side-to-side snap battery holders had a lot of negative comments, so I chose separate battery holders with wire leads coming off. The price was quite low. In the past i have even soldered right to the battery, but that's not the elegant or flexible way to go.

Which reminds me, I have a couple VTVMs with soldered in 1.5 volt batteries, and I should replace that system with a battery holder instead.
-Hue

28215. Re: [regenrx] Re: KITCHIN regen version 4

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-29 00:04:30 UTC
From: Rob
Topic: 28008 Message: 28215

Side by side birds-eye view looks to me like all the parts are there.
All FOUR of my KITCHIN PCBs heard Radio Havana Cuba on 6Mhz VERY LATE
at night.
But are deaf in daylight hours hearing only AC static hum.
Perhaps it works..but only late at night when skip is coming in?

On 05/28/2017 12:18 PM, rabej_de@... [regenrx] wrote:
>
> Hi, group,
>
> Rob (kb3by) obliged me by sending me a complete kit for his version of
> the little Kitchin regen receiver
> (http://www.learnmorsecode.com/regen/00regen.html).
>
> Due to a public holiday on Thursday I was able to spend some time and
> fired up my soldering station.
> I have taken some pictures which can be accessed via my own website at
> http://www.k-code.de/images/Kitchin_regen.html.
>
> Rob very carefully prepared and wrapped the kit for me.
> After I printed out a template for the circuit board layout, soldering
> didn't take longer than an hour.
> All parts are of ordinary size, however, I had to use a magnifier due
> to being farsighted.
>
> Now here's my problem : I can't seem to get the little receiver working.
> It simply won't go into regeneration at all.
>
> Since I planned to use it for the NDB-band (200 - 600 kHz) I thought
> it would be a good idea to first test it with the Coil and capacitor
> mentioned in Kitchin's document.
>
> However - not working at all.
> I swapped the ends of the tickler coil - did not help.
> I checked all components incl. the correct assembly of the three
> electrolytic C's, transist ors and diodes.
> The receiver draws some 12.5 mA from a brand new 9V battery.
>
> I have absolutely no idea what went wrong.
>
> Would someone on the list be able to help where to start to search for
> the fault?
>
> Thanks very much in advance.
>

> 73s
>
> Joachim
>
>

28216. Simplest crystal filter performance ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-29 00:30:41 UTC
From: Hubert Miller
Topic: 28216 Message: 28216

Gang, Les sent me schematic of a three-valve, 4 stage receiver: 6K8 converter; 6C8 BFO and audio; 6J7 regen detector.
The schematic doesn't have parts values. So anyone - including Les - I am specifically interested in the
range of frequencies that the crystal could be in, and - -
the value of the crystal load resistor, which is also the 6J7 grid leak.

It seems to me the value of the grid leak and the crystal load are at opposite goals: the higher grid leak makes for
more sensitivity (at the price of poorer strong-signal handling), and -
the crystal performance is diminished by higher values of load resistor.

I watched a video by Mikrowave1, title something like "Command Sets #4", where he was investigating selectivity
improvements for this WW2 aircraft receiver with a 2830 kHz IF. He put a 2837 ex-2 MHz marine band crystal in
the pluggable IF can and got great results, "narrow SSB filter" selectivity, but his circuit uses a tapped input coil,
phasing trimmer cap, and a load of something like 56k. So I am kind of wondering how the single crystal, no frills,
high load impedance works. I don't have the time or equipment to do a selectivity sweep now.
This is not the first incarnation of the no-frills series crystal filter I have seen. I believe I saw an article in CQ magazine
from the 1950s titled "Mobile Selectivity" where a crystal was inserted between the shortwaves converter and the
car radio, and then in another CQ article, or book from the 1980s a 455 rock was simply inserted in series in some
simple 80 meter SSB-CW receiver project.
So I suppose I'm wondering what the passband curve of a single crystal would look like, also.
thanks-
Hue

28217. Re: [regenrx] Re: Two tubes

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-29 00:54:41 UTC
From: Richard
Topic: 28214 Message: 28217

I always move batteries outside the box. Left inside one will
inevitably leak and corrode things.

Richard, AA1P

On 05/28/2017 05:58 PM, Hubert Miller kargo_cult@... [regenrx] wrote:
>
> 30 mA is a pretty heavy load for the 9 volt batteries, isn't it? I
> think the average draw on
> them in the old "pocket radios" they were intended for, was about 10
> mA average, no?
>
> I suppose since the mode would be CW the average drain would be much
> less so not so
> bad for their life. Still, being hit with a 30 mA draw is hard on them.
>
> I suggest the dollar stores. You can get 2 for $1 there.
> BTW, I bought some D-cell battery boxes recently to power up various
> things with 1.5
> or 3 volts DC. There were some interesting looking ones that could
> snap together sideways
> or in series so you could get various voltages and current capacities,
> however the reviews
> of the side-to-side snap battery holders had a lot of negative
> comments, so I chose
> separate battery holders with wire leads coming off. The price was
> quite low. In the past i
> have even soldered right to the battery, but that's not the elegant or
> flexible way to go.
>
> Which reminds me, I have a couple VTVMs with soldered in 1.5 volt
> batteries, and I should
> replace that system with a battery holder instead.
> -Hue
>
>

28218. Re: [regenrx] Simplest crystal filter performance ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-29 01:16:27 UTC
From: Phil
Topic: 28216 Message: 28218

Hi,

See the article I did a number of years ago on a "Poor Boy's Crystal
Filter". I'm sure that it's performance will be different for a "Hi-Z"
load resistor in a Hi-Z grid circuit though.

http://www.qsl.net/ko6bb/xtal_filt.html

73 de Phil, KO6BB.
Specializing in DXing NDBs (Longwave Beacons).

Location: "The Beaconeer's Lair".
Merced, Central California, 37,18,37N 120,30,6W CM97rh
http://www.qsl.net/ko6bb/

HF/LF RADIOS:
HOMEBREW: 7 Tube+Rect 1v3 Regenerative RX for LF (built 2015)
PORTABLES: Realistic DX380, Grundig G6 Aviator, Grundig S450DLX
Icom: IC-7200 Xceiver, DSP IF & filters (~2015).
Kenwood: TS-450SAT Xceiver, cascaded 250/125Hz Inrad filters.
SDR: Softrock Ensemble II LF (built from a kit 2017).

ACC: HOMEBREW LF-MF Pre-Amp, MFJ-993B HF Auto-Tuner.
HOMEBREW 4 Port Antenna Multicoupler, Feeds 4 RX's.
AF Filters: Timewave DSP-599zx & HOMEBREW 8 Hz Filter.

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.
Cushcraft AR-10 Ringo at 14 feet AGL.

On 5/29/2017 12:30 AM, Hubert Miller kargo_cult@... [regenrx] wrote:
>
> Gang, Les sent me schematic of a three-valve, 4 stage receiver: 6K8
> converter; 6C8 BFO and audio; 6J7 regen detector.
> The schematic doesn't have parts values. So anyone ? including Les ? I
> am specifically interested in the
>
> range of frequencies that the crystal could be in, and - -
>
> the value of the crystal load resistor, which is also the 6J7 grid leak.
>
> It seems to me the value of the grid leak and the crystal load are at
> opposite goals: the higher grid leak makes for
>
> more sensitivity (at the price of poorer strong-signal handling), and ?
>

> the crystal performance is diminished by higher values of load resistor.
>
> I watched a video by Mikrowave1, title something like "Command Sets
> #4", where he was investigating selectivity
>
> improvements for this WW2 aircraft receiver with a 2830 kHz IF. He put
> a 2837 ex-2 MHz marine band crystal in
>
> the pluggable IF can and got great results, "narrow SSB filter"
> selectivity, but his circuit uses a tapped input coil,
>
> phasing trimmer cap, and a load of something like 56k. So I am kind of
> wondering how the single crystal, no frills,
>
> high load impedance works. I don't have the time or equipment to do a
> selectivity sweep now.
> This is not the first incarnation of the no-frills series crystal
> filter I have seen. I believe I saw an article in CQ magazine
>
> from the 1950s titled "Mobile Selectivity" where a crystal was
> inserted between the shortwaves converter and the
>
> car radio, and then in another CQ article, or book from the 1980s a
> 455 rock was simply inserted in series in some
>
> simple 80 meter SSB-CW receiver project.
>
> So I suppose I'm wondering what the passband curve of a single crystal
> would look like, also.
>
> thanks-
>
> Hue
>

This email has been checked for viruses by AVG.
http://www.avg.com

28219. RE: [regenrx] Simplest crystal filter performance ?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-29 02:06:17 UTC
From: Hubert Miller
Topic: 28216 Message: 28219

Phil, yes, that's what I mean. I am aware this is easier to do and have success with at 455 kHz than say, 2830 kHz, particularly about skipping any
phasing capacitor, but I don't have any specifics. (My handy-dandy Shure Bros. slide rule says 10 pF at 0.5 MHz ~= 30K, while 10 pF at 3 MHz
~ = 5K ohm.
The "Command Sets" video narration said that with the crystal filter and phasing cap, it was "almost too narrow" for non-contesting SSB. I was
thinking, if that's the case, he could have increased the value of the load resistor.

Just curious - what is the load value in your receiver, the one with the added 455 kHz rock?
I see some filter loads that are resistive, think I have seen some that are purely capacitive.

I just now put a 2450 kHz rock on my LCR meter and it says 17 pF. I don't know what the crystal package is called; it's a boat radio crystal larger
than FT-243. I don't have any FT-243 or HC-6 around to check. I sort of conclude that for crystals in the region ~ 0.5 MHz, okay to omit any
'phasing capacitor, but for around 2-3 MHz up, you want to phase out that crystal holder capacitance.
-Hue

28220. RE: [regenrx] Re: Two tubes

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-29 02:09:21 UTC
From: Hubert Miller
Topic: 28214 Message: 28220

Yes, I'm thinking that too. Attach a battery holder to the side of the instrument. I have a Millen dipmeter
that requires removing a bunch of screws to replace the battery. I love Millen engineering but on this point,
they fell down.
-Hue

>I always move batteries outside the box. Left inside one will inevitably leak and corrode things.

Richard, AA1P

28221. Re: [regenrx] Re: Two tubes

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-29 03:44:28 UTC
From: Jordan Dobrikin
Topic: 28214 Message: 28221

Hi
Rechargeable Batteries

My $0.02 and then on to Stephan's Article

Low Self Discharge AA Batteries with inexpensive AA to D adapters as well as AAA to C.

There are rechargeable 9 volt Batteries but they are a bit pricey.

Low Self Discharge ALKALINE. A solution looking for a problem.
A niche market for medium duty discharge that gives a full 1.56 volts but cant sustain the surges like the more expensive 1.2 volt Eneloop Low Self Discharge NIMH Batteries.

Great for Flashlights, regular use and in Emergency Packs,Clocks Stereo and TV Remote Controls Portable Shortwave Radios, no noise from AC power packs,RC Control Transmitters not Vehicles.

73 de Jordan ve7jjd

http://stephan.win31.de
Sanyo Eneloop rechargeable's
For someone who likes to use his portables on batteries yet would not like to waste a bunch of primary cells, rechargeables are the power source of choice.
Now conventional NiMH types have a number of drawbacks, one of the biggest ones certainly being high self-discharge rates (even more so in current high-capacity cells than in those with about 2000 mAh or less). If you have a drawer full of radios that may not be used for some time, you can bet that by the time you want to use a particular one, its cells will be almost flat yet again. That doesn't get any better with age, and if you've got some damaged cells in there, it's even more fun. (Again, the very high-capacity stuff has proven quite unreliable, being easily damaged by overcharging. Out of two sets of four 2500 mAh Sanyo cells for camera use, always charged in a "good" charger not known for blatant overcharging as long as the cells were halfway low resistance, a total of three cells showed excessive discharging indicative of internal leakage. Sure enough, the camera always complained about empty batteries pretty soon whenever it was used.) A good occupational therapy. Conventional NiMHs should be called "chargeables", since that's what you end up doing most of the time…
To the rescue came Sanyo's Eneloop cells, the first exponents of the new crop of NiMH+ / "low self discharge" / "ready to use" cells. First introduced in Japan late 2005, they slowly became available worldwide the next year. Nominal capacities include 2000 mAh in AA (R6) and 800 mAh in AAA (R3) size, with C and D sizes being covered by mechanical adapters (C and D sized cells with minimum capacities of 3000 and 5700 mAh and

PTC-based short-circuit protection were eventually announced in 2008, suspected to contain three AAA or AA cells each, respectively). While capacities were somewhat smaller than what was available in conventional NiMH cells, they soon built a reputation for low self-discharging, low internal resistance (with decent performance even at low temperatures – the product launch "down under" was staged in an ice bar, now how cool (literally) is that?) and excellent matching that made creating hand-matched sets of cells redundant. There have also been very few reports of failures (which is to say that I haven't been able to find any, just statements of very low failure rates).

Pricing of Eneloops is about 10 EUR for a set of four AA or AAA cells. Competing cells, marketed under quite a number of brands but only manufactured by a handful of OEMs, typically have a specified capacity of 2100 mAh in AA size and somewhat worse properties otherwise. They do not all appear to be as rugged as the Sanyo cells.

Currently I have several sets of Eneloops in use, mostly AA (plus 4 pieces AAA), first bought for my camera (a somewhat picky beast) and then displacing more and more of the conventional NiMH cells in my radios (currently none of the 2500 mAh Sanyos are in use and all of the crappy old 2200 mAh noname cells have gone to recycling, but some 1850 mAh Sanyos bought as NOS remain). Do they live up to their reputation?

In a word, yes. While they will eventually lose some voltage when sitting around for a while (but then still give off plenty of charge even at untypically low levels) and I guess internal resistance will creep up as in conventional NiMHs, self-discharging is much reduced, and so is the number of extra charging cycles – actually, I don't think I've recharged any of them for anything but "real" current drain from the devices they were used in. In both my little Olympus (2x AA) and my dad's Fuji (4x AA), they keep on going and going. During charging at 700 mA, they do not get overly warm, and end-of-charge detection works reliably (the charger has a habit of failing to do this given cells with high internal resistance). Voltages and capacities stray very little between cells, to the point that they may be within a mV even after some time. Accidental deep discharging happened once or twice so far, from which the cells seem to have recovered well.

Failures? None so far.

The verdict? Eneloops have definitely made life with rechargeables a lot easier. They go a long way towards closing the gap between conventional NiMHs and the user-friendliness of lithium based cells. You still need a decent charger for them and deep discharging should be avoided as much as for other NiMH cells, but other than that they're pretty much bulletproof.

Recommended? You bet!

Postscript: By now, you can also obtain higher-capacity "XX powered by Eneloop" cells with 2500 mAh (HR-3UWX, vs. HR-3UTG for the "classic" Eneloops or HR-3UTGA for the 2nd-generation ones). These are mainly geared towards digital cameras and such, with the expected results of thinner membranes: Higher self-discharge rates, less cycles, less robustness. Inner resistance still seems fine though. I think us radio nuts are better off sticking with the standard types, which are cheaper to boot (plus you can also buy them in flashy colors if you're so inclined).

Hi

Thanx
73 de Jordan ve7jjd

On Sun, May 28, 2017 at 7:09 PM, Hubert Miller kargo_cult@... [regenrx]
<regenrx@yahoogroups.com> wrote:

>
>
> Yes, I'm thinking that too. Attach a battery holder to the side of the
> instrument. I have a Millen dipmeter
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> that requires removing a bunch of screws to replace the battery. I love
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> >I always move batteries outside the box. Left inside one will inevitably
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> Richard, AA1P
>
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>

28222. Re: [regenrx] Re: Two tubes

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-29 04:24:40 UTC
From: Bill Cromwell
Topic: 28214 Message: 28222

Hi,

The 30 mA figure would be for three tubes all at full power (only the final would be) and less than 50 percent efficiency - a worst case. It is not difficult to beat 'less than 50 percent'. I will have to look up the specs to see if the current drain was given for the two-tube mopa project. The oscillator and any buffer tubes will not be running at one watt output. I can't report exact results because I haven't built, tested, and used the TX. Recalculating just the current draw for the final at one watt and 50 percent efficiency (can be surpassed) comes to 15 mA. I will report back here when I can get that project finished.

For my command receivers I use rechargeable 12 volt "SLAB" batteries for the heaters. I could also build a solid state multivibrator B+ supply - exactly like a solid state mechanical vibrator supply with a 12 volt source. The 90 volt packs last me a long time. I have observed that they will still run the radio when 10 of them have dropped below 75 volts at full load. 1.5 volt cells would be much larger in any kind of series pack as 60 of them would be required for 90 volts. If the dollar store 9 volt batteries suffer a drastic price increase, the multivibrator supply is the way I will go. Rechargeable 9 volt batteries don't perform very well. Given my previous experience with them I am unwilling to buy ten or twenty of them for this kind of a "man's job".

Always be aware that batteries left sitting for long periods of time (months? years?) do unpleasant things. The least being "won't work any more".

73,

Bill KU8H

On 05/28/2017 11:44 PM, Jordan Dobrikin jjdobrikin@... [regenrx] wrote:
> Hi
> Rechargeable Batteries
>
> My $0.02 and then on to Stephan's Article
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> Low Self Discharge AA Batteries with inexpensive AA to D adapters as
> well as AAA to C.
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> less). If you have a drawer full of radios that may not be used for
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> one, its cells will be almost flat yet again. That doesn't get any
> better with age, and if you've got some damaged cells in there, it's
> even more fun. (Again, the very high-capacity stuff has proven quite
> unreliable, being easily damaged by overcharging. Out of two sets of
> four 2500 mAh Sanyo cells for camera use, always charged in a "good"
> charger not known for blatant overcharging as long as the cells were
> halfway low resistance, a total of three cells showed excessive
> discharging indicative of internal leakage. Sure enough, the camera
> always complained about empty batteries pretty soon whenever it was
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> called "chargeables", since that's what you end up doing most of the time…
> To the rescue came Sanyo's Eneloop cells, the first exponents of the
> new crop of NiMH+ / "low self discharge" / "ready to use" cells. First
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> the next year. Nominal capacities include 2000 mAh in AA (R6) and 800
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> available in conventional NiMH cells, they soon built a reputation for
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> even at untypically low levels) and I guess internal resistance will
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> and so is the number of extra charging cycles – actually, I don't
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> recovered well. Failures? None so far.
> The verdict? Eneloops have definitely made life with rechargeables a
> lot easier. They go a long way towards closing the gap between
> conventional NiMHs and the user-friendliness of lithium based cells.
> You still need a decent charger for them and deep discharging should
> be avoided as much as for other NiMH cells, but other than that
> they're pretty much bulletproof. Recommended? You bet!
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> thinner membranes: Higher self-discharge rates, less cycles, less
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>
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> Hi
>
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> Thanx
> 73 de Jordan ve7jjd
>
> On Sun, May 28, 2017 at 7:09 PM, Hubert Miller kargo_cult@...
> <mailto:kargo_cult@...> [regenrx] <regenrx@yahoogroups.com

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> Richard, AA1P
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>
>

--
bark less - wag more

28223. RE: [regenrx] Re: Two tubes

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-29 04:44:07 UTC
From: Hubert Miller
Topic: 28214 Message: 28223

I want to issue a slight "maybe" to your post.
I do store my batteries in the refrigerator.
However, I used to work in the telecom industry. I used to grab discarded 45 volt batteries after they no longer met the self-test standard
in the special test set using them. The self-test was that they would short circuit drive 1.5 amps! These are ordinary B size batteries, I don't
have one handy right now, but they're about like 2 of the old 67.5 volt batts pressed together.
I still have a couple 12-pack boxes and these are from 10-20 years old. They will still power some tube receivers that only use around 10 mA.
For years I was giving them to a friend to power his GRC-9 receiver.
I just looked at some "1.5 volt ignitor" batteries that are resting in my fridge. The date code is 0111 which I assume - guess may be 2011 or
2001 - I think it is 2001 tho. They still have a charge strong enough to light an LED to full brightness. I keep them around for eventual use
with one of those little one-tube radio kits I have.
No - I don't know how long the 1.5 volt batt will last, but "the price was right".
And the 45 volters, under the low drain I specified, last many hours.
-Hue

>Always be aware that batteries left sitting for long periods of time
(months? years?) do unpleasant things. The least being "won't work any
more".
73, Bill KU8H

28224. Re: [regenrx] Re: Two tubes

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-29 07:18:43 UTC
From: Jordan Dobrikin
Topic: 28214 Message: 28224

HI
A/The Lithium Ion Battery 18650 enters the fray
73 de Jordan ve7jjd

http://www.ebay.ca/itm/8-4V-USB-DC-Ports-Bicycle-Bike-Light-Battery-18650-Holder-Case-Box-Compartment-/131711669457?hash=item1eaaa094d1:g:UmwAAOSwZG9WhV7o

-

* Item condition:*
New
rice:
US $10.99
Free shipping
Approximately C $14.78(including shipping)

Items shipping internationally may be subject to customs processing
depending on the item's declared value.
Sellers set the item's declared value and must comply with customs
declaration laws.
Buyers may be subject to additional charges for customs clearance.
Visit eBay's page on international trade
<http://pages.ebay.ca/globaltrade/index.html>.

Item location:
shenZhen, China

Ships to:
Worldwide | See exclusions
<http://www.ebay.ca/itm/8-4V-USB-DC-Ports-Bicycle-Bike-Light-Battery-18650-Holder-Case-Box-Compartment-/131711669457?hash=item1eaaa094d1:g:UmwAAOSwZG9WhV7o#shpCntId>
Import charges:
(amount confirmed at checkout) To be provided at checkout *help icon for
Shipping - opens a layer*
This amount includes applicable customs duties, taxes, brokerage and other
fees. This amount is subject to change until you make payment. For
additional information, see the Global Shipping Program terms and conditions*-
opens in a new window or tab*
<http://pages.ebay.ca/shipping/globalshipping/buyer-tnc.html#programfees> This
amount includes applicable customs duties, taxes, brokerage and other fees.
This amount is subject to change until you make payment. If you reside in
an EU member state besides UK, import VAT on this purchase is not
recoverable. For additional information, see the Global Shipping Program terms
and conditions*- opens in a new window or tab*
<http://pages.ebay.ca/shipping/globalshipping/buyer-tnc.html#programfees>
Delivery:

Estimated Delivery within 12-36 business days
Seller ships within 1 day after receiving cleared payment *- opens in a new window or tab*
<http://pages.ebay.ca/help/buy/contextual/domestic-handling-time.html>.
International shipping and import charges paid to Pitney Bowes Inc. Learn More*- opens in a new window or tab*
<http://pages.ebay.ca/shipping/globalshipping/buyer-tnc.html#paymentsplit> Any international shipping and import charges are paid in part to Pitney Bowes Inc. Learn More*- opens in a new window or tab*
<http://pages.ebay.ca/shipping/globalshipping/buyer-tnc.html#paymentsplit>
International shipping paid to Pitney Bowes Inc. Learn More*- opens in a new window or tab*
<http://pages.ebay.ca/shipping/globalshipping/buyer-tnc.html#paymentsplit> Any international shipping is paid in part to Pitney Bowes Inc. Learn More*- opens in a new window or tab*
<http://pages.ebay.ca/shipping/globalshipping/buyer-tnc.html#paymentsplit>
Returns:
60 day money back, buyer pays return shipping | See details
<http://www.ebay.ca/itm/8-4V-USB-DC-Ports-Bicycle-Bike-Light-Battery-18650-Holder-Case-Box-Compartment-/131711669457?hash=item1eaaa094d1:g:UmwAAOSwZG9WhV7o#rpdCntId>
Coverage:
Read item description or contact seller for details. See all details
<http://www.ebay.ca/itm/8-4V-USB-DC-Ports-Bicycle-Bike-Light-Battery-18650-Holder-Case-Box-Compartment-/131711669457?hash=item1eaaa094d1:g:UmwAAOSwZG9WhV7o#viTabs>
(Not eligible for eBay purchase protection programs)
People who viewed this item also viewed1/1F
<http://qu.ebay.ca/survey?srvName=merchandising+%28merch1%29&extparam=pageid%3d2047675%26plmtid%3d100005>

-

8.4V 4400mAh Rechargeable 2x 18650 Battery…

<http://www.ebay.ca/itm/8-4V-4400mAh-Rechargeable-2x-18650-Battery-Pack-For-Head-lamp-Bike-Bicycle-Light/182391752973?_trksid=p2047675.c100005.m1851&_trkparms=aid%3D222007%26algo%3DSIC.MBE%26ao%3D1%26asc%3D20140620091118%26meid%3D91723fb7411e4318b7747b3976420b04%26pid%3D100005%26rk%3D1%26rkt%3D6%26sd%3D131711669457>

C $12.44

Free shipping

- [image: 8.4V USB DC Ports Bicycle Bike Light 18650 Battery Holder Case Cell Charger Bank]

8.4V USB DC Ports Bicycle Bike Light 18650 B…

<http://www.ebay.ca/itm/8-4V-USB-DC-Ports-Bicycle-Bike-Light-18650-Battery-Holder-Case-Cell-Charger-Bank/201232493264?_trksid=p2047675.c100005.m1851&_trkparms=aid%3D222007%26algo%3DSIC.MBE%26ao%3D1%26asc%3D20140620091118%26meid%3D91723fb7411e4318b7747b3976420b04%26pid%3D100005%26rk%3D2%26rkt%3D6%26sd%3D131711669457>

C $13.99

Free shipping

- [image: 8.4V 4x 18650 Waterproof Battery Pack Case House Cover For
Bicycle Bike Lamp]

8.4V 4x 18650 Waterproof Battery Pack Case…

<http://www.ebay.ca/itm/8-4V-4x-18650-Waterproof-Battery-Pack-Case-House-Cover-For-Bicycle
-Bike-Lamp/142017251048?_trksid=p2047675.c100005.m1851&_trkparms=aid%3D222007%26algo%3DSIC
.MBE%26ao%3D1%26asc%3D20140620091118%26meid%3D91723fb7411e4318b7747b3976420b04%26pid%3D100
005%26rk%3D3%26rkt%3D6%26mehot%3Dpp%26sd%3D131711669457>

C $10.20

+ C $0.86

Popular

- [image: Rechargeable 8.4V USB 12000mAh 6X18650 Battery Pack For
Bicycle LAMP Bike Torch]

Rechargeable 8.4V USB 12000mAh 6X18650 B…

<http://www.ebay.ca/itm/Rechargeable-8-4V-USB-12000mAh-6X18650-Battery-Pack-For-Bicycle-LA
MP-Bike-Torch/352006415167?_trksid=p2047675.c100005.m1851&_trkparms=aid%3D222007%26algo%3D
SIC.MBE%26ao%3D1%26asc%3D20140620091118%26meid%3D91723fb7411e4318b7747b3976420b04%26pid%3D
100005%26rk%3D4%26rkt%3D6%26mehot%3Dpp%26sd%3D131711669457>

C $10.75

+ C $2.68

Popular

- [image: 8.4V USB Rechargeable 12000mAh 6X18650 Battery Pack For
Bicycle light Bike Torch]

8.4V USB Rechargeable 12000mAh 6X18650 B…

<http://www.ebay.ca/itm/8-4V-USB-Rechargeable-12000mAh-6X18650-Battery-Pack-For-Bicycle-li
ght-Bike-Torch/152527306026?_trksid=p2047675.c100005.m1851&_trkparms=aid%3D222007%26algo%3
DSIC.MBE%26ao%3D1%26asc%3D20140620091118%26meid%3D91723fb7411e4318b7747b3976420b04%26pid%3
D100005%26rk%3D5%26rkt%3D6%26sd%3D131711669457>

C $16.11

+ C $6.99

- [image: 8.4V USB Rechargeable 12000mAh 6X18650 Battery Pack For
Bicycle Light Bike Torch]

8.4V USB Rechargeable 12000mAh 6X18650 B…

<http://www.ebay.ca/itm/8-4V-USB-Rechargeable-12000mAh-6X18650-Battery-Pack-For-Bicycle-Light-Bike-Torch/381853837278?_trksid=p2047675.c100005.m1851&_trkparms=aid%3D222007%26algo%3DSIC.MBE%26ao%3D1%26asc%3D20140620091118%26meid%3D91723fb7411e4318b7747b3976420b04%26pid%3D100005%26rk%3D6%26rkt%3D6%26sd%3D131711669457>

C $13.31

Free shipping

Report item* - opens in a new window or tab*
<http://cgi1.ebay.ca/ws/eBayISAPI.dll?ReportThisItemRedirect&active=1&rt=nc&_trksid=p2047675.l2566&itemid=131711669457&seller=jianlight68>

- Description current
<http://www.ebay.ca/itm/8-4V-USB-DC-Ports-Bicycle-Bike-Light-Battery-18650-Holder-Case-Box-Compartment-/131711669457?hash=item1eaaa094d1:g:UmwAAOSwZG9WhV7o#>
- Shipping and payments
<http://www.ebay.ca/itm/8-4V-USB-DC-Ports-Bicycle-Bike-Light-Battery-18650-Holder-Case-Box-Compartment-/131711669457?hash=item1eaaa094d1:g:UmwAAOSwZG9WhV7o#>

eBay item number:
131711669457
Seller assumes all responsibility for this listing.
Last updated on Apr 27, 2017 03:57:49 EDT View all revisions
<http://cgi.ebay.ca/ws/eBayISAPI.dll?ViewItemRevisionDetails&item=131711669457&rt=nc&_trksid=p2047675.l2569>
Item specifics
Condition:
New: A brand-new, unused, unopened, undamaged item in its original packaging (where packaging is applicable). Packaging should be the same as what is found in a retail store, unless the item is handmade or was packaged by the manufacturer in non-retail packaging, such as an unprinted box or plastic bag. See the seller's listing for full details. See all condition definitions*- opens in a new window or tab*
<http://pages.ebay.ca/help/sell/contextual/condition_11.html> ... Read more*about the condition*
Type: USB DC battery case
Features: 8.4v Waterproof Battery box Brand: Unbranded
Country/Region of Manufacture: China MPN: Does Not Apply
UPC: Does not apply
jianlight68
jianlight68 <http://www.ebay.ca/usr/jianlight68?_trksid=p2047675.l2559> (
17741
<http://feedback.ebay.ca/ws/eBayISAPI.dll?ViewFeedback&userid=jianlight68&iid=131711669457&ssPageName=VIP:feedback&ftab=FeedbackAsSeller&rt=nc&_trksid=p2047675.l2560>
)
98.6%
[image: Sign up for newsletter] Sign up for newsletter
<http://my.ebay.ca/ws/eBayISAPI.dll?AcceptSavedSeller&linkname=includenewsletter&sellerid=jianlight68&_trksid=>
Visit Store: jianlight68

<http://stores.ebay.ca/jianlight68?_trksid=p2047675.l2568>
Hi jordajoshu_0. If you like what you see, browse my Store* - opens in a
new window or tab*
<http://stores.ebay.ca/jianlight68/_i.html?_armrs=1&_dmd=1&_ipg=30&_sasi=1&_sop=1&_vc=1>
to find more items you may love.
Items On Sale
<http://stores.ebay.ca/jianlight68/_i.html?LH_SaleItems=1&_armrs=1&_dmd=1&_ipg=30&_sasi=1&
_sop=1&_vc=1>
Bicycle light
<http://stores.ebay.ca/jianlight68/Bicycle-light-/_i.html?_fsub=8096599013>
Flashlight
<http://stores.ebay.ca/jianlight68/Flashlight-/_i.html?_fsub=8096600013>
Laser Pointers
<http://stores.ebay.ca/jianlight68/Laser-Pointers-/_i.html?_fsub=8096604013>
diving flashlight
<http://stores.ebay.ca/jianlight68/diving-flashlight-/_i.html?_fsub=8486075013>
call phone & Accessories
<http://stores.ebay.ca/jianlight68/call-phone-Accessories-/_i.html?_fsub=9890961013>
Categories

- Laser Pointers
<http://stores.ebay.ca/jianlight68/Laser-Pointers-/_i.html?_fsub=8096604013>
- Bicycle light
<http://stores.ebay.ca/jianlight68/Bicycle-light-/_i.html?_fsub=8096599013>
- Flashlight
<http://stores.ebay.ca/jianlight68/Flashlight-/_i.html?_fsub=8096600013>
- diving flashlight
<http://stores.ebay.ca/jianlight68/diving-flashlight-/_i.html?_fsub=8486075013>
- Headlamp
<http://stores.ebay.ca/jianlight68/Headlamp-/_i.html?_fsub=8096603013>
- Red Dot & Laser Scopes
<http://stores.ebay.ca/jianlight68/Red-Dot-Laser-Scopes-/_i.html?_fsub=8096601013>
- Scope Mounts & Accessories
<http://stores.ebay.ca/jianlight68/Scope-Mounts-Accessories-/_i.html?_fsub=8096605013>
- Stage light
<http://stores.ebay.ca/jianlight68/Stage-light-/_i.html?_fsub=8271032013>
- call phone & Accessories
<http://stores.ebay.ca/jianlight68/call-phone-Accessories-/_i.html?_fsub=9890961013>
- Car & Truck Parts
<http://stores.ebay.ca/jianlight68/Car-Truck-Parts-/_i.html?_fsub=11085428013>
- Watch
<http://stores.ebay.ca/jianlight68/Watch-/_i.html?_fsub=11500048013>
- Charger and Battery
<http://stores.ebay.ca/jianlight68/Charger-and-Battery-/_i.html?_fsub=11820248013>
- Computers/Tablets & Networking
<http://stores.ebay.ca/jianlight68/Computers-Tablets-Networking-/_i.html?_fsub=12051912013
>
- Binoculars & Telescopes
<http://stores.ebay.ca/jianlight68/Binoculars-Telescopes-/_i.html?_fsub=12051917013>
- Home & Garden

<http://stores.ebay.ca/jianlight68/Home-Garden-/_i.html?_fsub=12676688013>
- Business & Industrial
<http://stores.ebay.ca/jianlight68/Business-Industrial-/_i.html?_fsub=42953927013>
- Consumer Electric
<http://stores.ebay.ca/jianlight68/Consumer-Electric-/_i.html?_fsub=49891015013>
- Pet Supplier
<http://stores.ebay.ca/jianlight68/Pet-Supplier-/_i.html?_fsub=57298473013>
- Sports Goods Accessary
<http://stores.ebay.ca/jianlight68/Sports-Goods-Accessary-/_i.html?_fsub=58101603013>
- Sonstige <http://stores.ebay.ca/jianlight68/Sonstige-/_i.html?_fsub=1>

Questions and answers about this item
No questions or answers have been posted about this item.
Ask a question* - opens in a new window or tab*
<http://contact.ebay.ca/ws/eBayISAPI.dll?ShowSellerFAQ&iid=131711669457&requested=jianligh
t68&redirect=0&frm=284&rt=nc&_trksid=p2047675.l1499&ssPageName=PageSellerM2MFAQ_VI>

Seller assumes all responsibility for this listing.
Shipping and handling
This item will ship to * Canada*, but the seller has not specified shipping
options. Contact the seller*- opens in a new window or tab*
<http://contact.ebay.ca/ws/eBayISAPI.dll?ShowCoreAskSellerQuestion&redirect=0&requested=ji
anlight68&iid=131711669457>
and request a shipping method to your location.
Shipping cost cannot be calculated. Please enter a valid Postal Code.
Item location: shenZhen, China
Shipping to: Worldwide
Excludes: Alaska/Hawaii, APO/FPO, US Protectorates, Africa, Central America
and Caribbean, South America, Bermuda, Greenland, Mexico, Saint Pierre and
Miquelon, Bahrain, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar,
Yemen, Afghanistan, Armenia, Bhutan, China, Georgia, Kazakhstan,
Kyrgyzstan, Mongolia, Nepal, Pakistan, Tajikistan, Turkmenistan,
Uzbekistan, American Samoa, Cook Islands, Fiji, French Polynesia, Guam,
Kiribati, Marshall Islands, Micronesia, Nauru, New Caledonia, Niue, Palau,
Papua New Guinea, Solomon Islands, Tonga, Tuvalu, Vanuatu, Wallis and
Futuna, Western Samoa, Albania, Andorra, Austria, Bosnia and Herzegovina,
Gibraltar, Guernsey, Iceland, Jersey, Liechtenstein, Macedonia, Moldova,
Montenegro, Serbia, Svalbard and Jan Mayen, Vatican City State, Brunei
Darussalam, Cambodia, Vietnam, PO Box
Quantity:
Change country: -Select- Australia Azerbaijan Republic Bangladesh Belarus
Belgium Bulgaria Canada Croatia, Republic of Cyprus Czech Republic Denmark
Estonia Finland France Germany Greece Hong Kong Hungary India Indonesia
Ireland Italy Japan Korea, South Laos Latvia Lithuania Luxembourg Macau
Malaysia Maldives Malta Monaco Netherlands New Zealand Norway Philippines
Poland Portugal Romania Russian Federation San Marino Saudi Arabia Singapore
Slovakia Slovenia Spain Sri Lanka Sweden Switzerland Taiwan Thailand Turkey
Ukraine United Arab Emirates United Kingdom United States
There are 4 items available. Please enter a number less than or equal to 4.
Select a valid country.
Postal Code:

Please enter a valid Postal Code.
Please enter 6 digits for the Postal Code.
Shipping and handlingToServiceDelivery*
<http://www.ebay.ca/itm/8-4V-USB-DC-Ports-Bicycle-Bike-Light-Battery-18650-Holder-Case-Box-Compartment-/131711669457?hash=item1eaaa094d1:g:UmwAAOSwZG9WhV7o#instrTextTable>

Free shipping
Canada
Economy Shipping from China/Hong Kong/Taiwan to worldwide
Estimated Delivery within 12-36 business days
Seller ships within 1 day after receiving cleared payment *- opens in a new window or tab*
<http://pages.ebay.ca/help/buy/contextual/domestic-handling-time.html>.
* Estimated delivery dates*- opens in a new window or tab*
<http://pages.ebay.ca/help/buy/contextual/estimated-delivery.html> include seller's handling time, origin Postal Code, destination Postal Code and time of acceptance and will depend on shipping service selected and receipt of cleared payment*- opens in a new window or tab*
<http://pages.ebay.ca/help/buy/contextual/domestic-handling-time.html>.
Delivery times may vary, especially during peak periods.
Domestic handling time
Will usually ship within 1 business day of receiving cleared payment* - opens in a new window or tab*
<http://pages.ebay.ca/help/buy/contextual/domestic-handling-time.html>.
Return policy
Item must be returned withinRefund will be given as
60 days after the buyer receives it Money Back
The buyer is responsible for return shipping costs.

Payment details
Payment methodPreferred/Accepted

[image: Credit card or Pre-authorized Debit through PayPal]
Accepted

time left
Current bid amount
+
Shipping amount
Bid Count
time left
current bid
+
shipping
bids
Approximately:
Current bid amount Approximately:
+
Shipping amount Approximately:
Import charges: (estimated and based on current bid) To be provided at checkout

Import charges:
(estimated and based on max bid) To be provided at checkout
Confirm
Your bid amount
Approximately:
Approximately:

OR
Your current max bid:
(Approximately:)
Increase your chances of winning by setting a higher bid now.
Let eBay place automatic bids for you This opens a help overlay dialogue
about automatic bidding.
How does automatic bidding work?
As other bids come in, eBay will automatically raise your bid in small
amounts, up to your limit. Learn More.* - opens in a new window or tab*
<http://pages.ebay.ca/help/buy/automatic-bidding.html>
Close button. This closes the help overlay dialogue.
, up to
Set automatic bid
By submitting your bid, you'll be committing to buy this item from the
seller if you are the winning bidder.
By submitting your bid, you are committing to buy this item from the seller
if you are the winning bidder. You have read and agree to the Global
Shipping Program terms and conditions * - opens in a new window or tab*
<http://pages.ebay.ca/shipping/globalshipping/buyer-tnc.html>. Import
charges previously quoted are subject to change if you increase you maximum
bid amount.
By clicking *Confirm*, you commit to buy this item from the seller if you
are the winning bidder.
By clicking *Confirm*, you are committing to buy this item from the seller
if you are the winning bidder and have read and agree to the Global
Shipping Program terms and conditions * - opens in a new window or tab*
<http://pages.ebay.ca/shipping/globalshipping/buyer-tnc.html>. Import
charges previously quoted are subject to change if you increase your
maximum bid amount.
Your feedback is submitted. Thank you for helping us improve! Tell us what
you think
We've made a few changes to bidding.
Were these helpful?
Yes No
Input comments here.
Cancel Submit
Loading...
Bid layer is updating the contents.
Resume bidding
<http://offer.ebay.ca/ws/eBayISAPI.dll?MakeBid&fromPage=2047675&item=131711669457&fb=2>,
if the page does not update immediately.
d
h
m

s
day
hour
hours
FREE shipping
See item description
+ See item description for shipping
Calculate
Approximately:
(Enter ##1## or more)
(Enter more than ##1##)
Your max bid:
You've been outbid. Don't let it get away - place another bid.
You've been outbid by an automatic bid placed earlier by another bidder.
You're the highest bidder on this item!
You're the first bidder on this item!
You're the highest bidder on this item, but you're close to being outbid.
This auction is almost over and you're currently the high bidder.
You're the high bidder on this item, but the reserve price hasn't been met
yet.
You've been outbid by someone else.
You can still win! Try bidding again.
You've been outbid by someone else's max bid.
You can still win! Try bidding again.
You've been outbid by someone else.
Try raising your max bid.
You're the highest bidder!
To increase your chances of winning, try raising your bid.
You're the first bidder. Good Luck!
You're still the highest bidder!
You increased your max bid to
Please enter your bid again.
Enter a valid amount for your bid.
Enter a bid that is the minimum bid amount or higher.
You have to bid at least
Sorry, you can't lower your maximum bid once it's placed.
This seller requires the buyer to have a PayPal account to purchase this
item. Get a PayPal account here
<http://www.paypal.com/us/cgi-bin/webscr?cmd=_registration-run>.
Your bid is the same as or more than the Buy It Now price. You can save
time and money by buying it now.
Place bid
Review and confirm your bid
Bid confirmation
Increase max bid
Enter a custom max bid more than ##2##
Enter a custom max bid of ##2## or more
+ ##2## approximate import charges
##2## (approximately)
Please enter a higher amount than the current bid.

+ ##2## for shipping
+ FREE SHIPPING
Bid ##3## now
Bid ##3##
Time left:
Current bid:
(approximately ##1##)
Your maximum bid:
(approximately ##1##)
Increase your maximum bid:
By clicking *1 Click Bid*, you commit to buy this item from the seller if
you're the winning bidder. Learn more*about 1-click bid - opens in a new
window or tab* <http://pages.ebay.ca/help/buy/contextual/fastbidding.html>
day
hour
min
sec
days
hours
mins
secs
(approximately ##1##)
Winning bid:
Starting bid:
Close
Congrats! The auction has ended and you're the winner.
The auction has ended, but the reserve price was not met.
Sorry, the auction has ended and you were outbid.
Good news, you're the high bidder.
Sorry, you've been outbid.
You're the high bidder, but the reserve price is not met.
Please enter a higher amount than the current bid.
Maximum bids cannot be lowered once submitted.
Please enter a valid number.
Sponsored Links
Back to home page <http://www.ebay.ca/> Return to top
<http://www.ebay.ca/itm/8-4V-USB-DC-Ports-Bicycle-Bike-Light-Battery-18650-Holder-Case-Box
-Compartment-/131711669457?hash=item1eaaa094d1:g:UmwAAOSwZG9WhV7o#>
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-
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- Community <http://community.ebay.ca/>
- Security Centre <http://pages.ebay.ca/securitycentre/index.html>
- Resolution Centre <http://resolutioncenter.ebay.ca/>
- Seller Information Centre
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- Policies <http://pages.ebay.ca/help/policies/overview.html>
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<http://cgi6.ebay.ca/ws/eBayISAPI.dll?AdChoiceLandingPage&partner=0>
X
[image: Scroll to top]
<http://www.ebay.ca/itm/8-4V-USB-DC-Ports-Bicycle-Bike-Light-Battery-18650-Holder-Case-Box
-Compartment-/131711669457?hash=item1eaaa094d1:g:UmwAAOSwZG9WhV7o#>
X

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[image:
8-4V-USB-DC-Ports-Bicycle-Bike-Light-Battery-18650-Holder-Case-Box-Compartment]
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8-4V-USB-DC-Ports-Bicycle-Bike-Light-Battery-18650-Holder-Case-Box-Compartment]
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[image:
8-4V-USB-DC-Ports-Bicycle-Bike-Light-Battery-18650-Holder-Case-Box-Compartment]

Hi

Thanx
73 de Jordan ve7jjd

On Sun, May 28, 2017 at 9:44 PM, Hubert Miller kargo_cult@... [regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> I want to issue a slight "maybe" to your post.
> I do store my batteries in the refrigerator.
> However, I used to work in the telecom industry. I used to grab discarded
> 45 volt batteries after they no longer met the self-test standard
> in the special test set using them. The self-test was that they would
> short circuit drive 1.5 amps! These are ordinary B size batteries, I don't
> have one handy right now, but they're about like 2 of the old 67.5 volt
> batts pressed together.
> I still have a couple 12-pack boxes and these are from 10-20 years old.
> They will still power some tube receivers that only use around 10 mA.
> For years I was giving them to a friend to power his GRC-9 receiver.
> I just looked at some "1.5 volt ignitor" batteries that are resting in my
> fridge. The date code is 0111 which I assume - guess may be 2011 or
> 2001 - I think it is 2001 tho. They still have a charge strong enough to
> light an LED to full brightness. I keep them around for eventual use
> with one of those little one-tube radio kits I have.
> No - I don't know how long the 1.5 volt batt will last, but "the price was
> right".
> And the 45 volters, under the low drain I specified, last many hours.
> -Hue
>
> >Always be aware that batteries left sitting for long periods of time
> (months? years?) do unpleasant things. The least being "won't work any
> more".
> 73, Bill KU8H
>
>

28225. Re: [regenrx] Re: KITCHIN regen version 4

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-29 12:35:50 UTC
From: Michael
Topic: 28008 Message: 28225

Joachim,

The main claims for the floating-diode Kitchin are

- high sensitivity
- relatively simple, low-component design

If sensitivity is low, somewhere the build may be
less than optimal as some emulators report good success.

Low sunspot activity currently affects propagation,
so different SW bands should be tried. Around 6-7MHz
there is always "something" to be heard in Europe.

The Kitchin design is controversial because of the
unterminated Ge diode. So the unpredictable effect of
"invisible" termination through leakage may be signnificant,
as are the individual characteristics of the Ge diode employed.
The other suspect is the coil, the design of which may
be critical.

Joachim, weiter forschen!

Hopefully, you will find the elusive answer, which will
be of great interest to all of us.

Michael 2E0IHW
.....

On 29.05.17 01:04, Rob roomberg@... [regenrx] wrote:
> Side by side birds-eye view looks to me like all the parts are there.
> All FOUR of my KITCHIN PCBs heard Radio Havana Cuba on 6Mhz VERY LATE
> at night.
> But are deaf in daylight hours hearing only AC static hum.
> Perhaps it works..but only late at night when skip is coming in?
...
> On 05/28/2017 12:18 PM, rabej_de@... [regenrx] wrote:
> ...
>> Rob (kb3by) obliged me by sending me a complete kit for his version of
>> the little Kitchin regen receiver
>> (<http://www.learnmorsecode.com/regen/00regen.html>http://www.learnmorsecode.com/regen/
00regen.html).
...
>> Now here's my problem : I can't seem to get the little receiver working.
>> It simply won't go into regeneration at all.
>>
>> Since I planned to use it for the NDB-band (200 - 600 kHz) I thought

>> it would be a good idea to first test it with the Coil and capacitor
>> mentioned in Kitchin's document.
>>
>> However - not working at all.
>> I swapped the ends of the tickler coil - did not help.
>> I checked all components incl. the correct assembly of the three
>> electrolytic C's, transist ors and diodes.
>> The receiver draws some 12.5 mA from a brand new 9V battery.
>>
>> I have absolutely no idea what went wrong.
>>
>> Would someone on the list be able to help where to start to search for
>> the fault?
>>
>> Thanks very much in advance.
>>
>> 73s
>>
>> Joachim

28226. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-29 22:03:33 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28226

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /zTemp/A 1941 Beginner's Receiver_files/3tuber3.jpg
Uploaded by : les.au49 <les.au49@...>
Description : Jones superhet, view of wiring, under chassis

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/zTemp/A%201941%20Beginner%26%2339%3Bs%20Receiver_files/3tuber3.jpg

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

les.au49 <les.au49@...>

28227. Jones Superhet - a 1941 Beginners Receiver.

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-29 22:37:05 UTC
From: les.au49@...
Topic: 28227 Message: 28227

Hello Hue & list readers,

Hue - I sent a circuit (but without parts list) by email. You asked for more detail PLUS the parts list.
This posting describes how to get that detail.

First, the article of interest came from W0VLZ and Mr. Google will find that page if you want the original.
Look for improved 3 tube superhet.

Alternately, look in RegenRx files - zTemp. If you use Firefox to open the only HTML file and go to the end of that page you'll find a link to W0VLZ's page. That link worked on my computer 5 minutes ago. If you look for a link to an improved 3 tube superhet you'll see the info you seek.

Description. Photos. Circuit. Parts list.

The images in the HTML file I posted DO NOT LOAD.
If you want to see the images, I put them in the sub-folder named 1941 beginners receiver (or something like that). I experimented to see if I could post a complete, working HTML file. The answer is 'yes' that can be done, BUT I didn't do first time!!

I think the 3 tube superhet represents a good balance between simplicity & performance for a homebrew receiver. A regenerodyne may provide superior performance on 20m and above. The Jones superhet may provide better performance on 80 & 40m. That's my view.

Les

28228. FS: DRAKE Low Pass Filters

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-30 10:37:30 UTC
From: Bry Carling
Topic: 28228 Message: 28228

FOR SALE:

DRAKE TV1000LP in excellent working condition.

Conservatively rated for 1000 Watts continuous.

Has two standard SO-239 connectors

Bright Shiny copper.

Available for $25.00 plus shipping

DRAKE TV100LP in excellent working condition.

Conservatively rated for 100 Watts continuous.

Has two standard SO-239 connectors

Available for $15.00 plus shipping

Pictures are available.

Please contact me off list. 73 - Bry Carling, AF4K

af4k AT hotmail (dot)com

28229. hartley low-voltage regen?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-30 18:45:42 UTC
From: msalbert@...
Topic: 28229 Message: 28229

I've been looking at some low voltage regen designs, and noticed that the ones I found are using separate tickler coil designs (vs. tapped coil Hartley). Is there a particular reason for this? Here are links to a few examples . . .
http://makearadio.com/tube/1-12af6.php
http://www.skywaves.ar88.net/homebrew/12Vregen.htm
http://www.qsl.net/kl7h/12v.htm
(QST also published a low-voltage, space charge tube superhet/regen design in 2003 that used a tickler)

These are mostly using 12 volt space charge tubes. I'm attempting get one going using a 32 volt DC supply using only junk box parts. I've given myself a limitation of that's the highest voltage I can use; hopefully that allows me to enter the standardish-tube realm. My plan is to start with a 9GH8 tube, using the pentode as the detector and triode for audio amp. If I can get this going then maybe other odd ball tubes will follow to make up the heater string. . . . 6GK5 as a GG RF amp and 15CW5 (aka PL84) audio amp stages . . . end result being a 1-v-2.

I welcome any comments / suggestions; thanks!

Regards,
Mark KB9VKE

28230. Re: [regenrx] hartley low-voltage regen?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-30 19:00:47 UTC
From: J Ed
Topic: 28229 Message: 28230

A few years back, I made a Hartley receiver using 24v, a 12AT7, and a 12AU7.

It worked decently, although it didn't seem to oscillate at the higher end
of the short wave coil. I did hear some short wave stations there.

Overall, I think it's a worthwhile project.

Ed AE7TE

On May 30, 2017 21:45, "msalbert@... [regenrx]" <regenrx@yahoogroups.com>
wrote:

>
>
> I've been looking at some low voltage regen designs, and noticed that the
> ones I found are using separate tickler coil designs (vs. tapped coil
> Hartley). Is there a particular reason for this? Here are links to a few
> examples . . .
> http://makearadio.com/tube/1-12af6.php
> http://www.skywaves.ar88.net/homebrew/12Vregen.htm
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> (QST also published a low-voltage, space charge tube superhet/regen design
> in 2003 that used a tickler)
>
> These are mostly using 12 volt space charge tubes. I'm attempting get
> one going using a 32 volt DC supply using only junk box parts. I've given
> myself a limitation of that's the highest voltage I can use; hopefully that
> allows me to enter the standardish-tube realm. My plan is to start with a
> 9GH8 tube, using the pentode as the detector and triode for audio
> amp. If I can get this going then maybe other odd ball tubes will follow
> to make up the heater string. . . . 6GK5 as a GG RF amp and 15CW5 (aka
> PL84) audio amp stages . . . end result being a 1-v-2.
>
> I welcome any comments / suggestions; thanks!
>
> Regards,
> Mark KB9VKE
>
>

28231. Re: [regenrx] hartley low-voltage regen?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-30 21:45:12 UTC
From: Jordan Dobrikin
Topic: 28229 Message: 28231

Hi
It will be interesting to see the responses.
Since the original invention used Tubes and Tickler Coil I suspect the
majority of modern Designs and Homebrews followed suit.
I suggest surfing Ebay for a low cost medium high voltage wallwart.

73 de Jordan ve7jjd
https://www.google.ca/search?q=tube+regenerative+receiver&
sa=X&biw=1088&bih=503&tbm=isch&tbo=u&source=univ&ved=
0ahUKEwjDja-75ujQAhUM8WMKHe-xBJkQsAQIGQ
http://www.qsl.net/wd4nka/TEXTS/1948Rf.HTM

http://makearadio.com/others/regenrx.php
http://www.vk6fh.com/vk6fh/12au7regen.htm
http://members.iinet.net.au/~cool386/kits/ace.html
https://www.youtube.com/watch?v=orSlJ9oJ3d0 Part 1https://www.youtube.com/
watch?v=9O6qUY7X4VA Part 2

https://www.google.ca/search?q=Signal+Generator+schematics&espv=2&tbm=isch&tbo=u&source=un
iv&sa=X&ved=0ahUKEwjx6NGSu6_TAhUH1GMKHauuBn0Q7AkITQ&biw=1098&bih=512#imgrc=RYERYYYreqWpbM:

Thanx
73 de Jordan ve7jjd

On Tue, May 30, 2017 at 12:00 PM, J Ed jedwardsat1@... [regenrx] <
regenrx@yahoogroups.com> wrote:

>
>
> A few years back, I made a Hartley receiver using 24v, a 12AT7, and a
> 12AU7.
>
> It worked decently, although it didn't seem to oscillate at the higher end
> of the short wave coil. I did hear some short wave stations there.
>
> Overall, I think it's a worthwhile project.
>
> Ed AE7TE
>
> On May 30, 2017 21:45, "msalbert@... [regenrx]" <
> regenrx@yahoogroups.com> wrote:
>
>>
>>
>> I've been looking at some low voltage regen designs, and noticed that the
>> ones I found are using separate tickler coil designs (vs. tapped coil

>> Hartley). Is there a particular reason for this? Here are links to a few
>> examples . . .
>> http://makearadio.com/tube/1-12af6.php
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>> http://www.qsl.net/kl7h/12v.htm
>> (QST also published a low-voltage, space charge tube superhet/regen
>> design in 2003 that used a tickler)
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>> one going using a 32 volt DC supply using only junk box parts. I've given
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>> allows me to enter the standardish-tube realm. My plan is to start with a
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>> PL84) audio amp stages . . . end result being a 1-v-2.
>>
>> I welcome any comments / suggestions; thanks!
>>
>> Regards,
>> Mark KB9VKE
>>
>>
>

28232. Re: [regenrx] hartley low-voltage regen?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-31 02:57:51 UTC
From: Jordan Dobrikin
Topic: 28229 Message: 28232

Hi
FYI
73 de Jordan ve7jjd

http://www.ebay.com/itm/172673096275?_trksid=p2060353.m1438.l2649&ssPageName=STRK%3AMEBIDX%3AIT

*iGen-Max Two Tube Regenerative Radio Kit ! (**Version 4 - **New for Jan 2014)*

Tube regenerative receiver based on original 1930's design, with a modern twist, Varactor tuning and a solid state audio amplifier.

- If you ever wondered how those early radio and wireless receivers from the 1920's worked, then why not build your very own.
- The whole set runs off 12 volts so is *absolutely safe to build and use*, no nasty high voltages, it is a great way to learn a new hobby!
- Easy assembly all the components are mounted on a high quality silk-screened fiber glass printed circuit board
- No coils to wind that has already been done for you!
- Simple follow instructions with both schematics wiring diagrams!
- You get a manual, all the parts including valve(s), sockets, jack plugs, tuning control, coils, resistors, wire, nuts and bolts etc.
- Complete with high quality silk screened double sided printed circuit board.
- This kit is also available with optional add-on SW Coil Kit

Specifications

- Type: Two Tube Regenerative Hybrid Vacuum Tube and Solid State Amp
- Tube #1: RF Amplifier stage
- Tube #2: RF Detector stage
- Tuning: Two Stage RF and Regen Varactor Diode Tuning
- IC Amp: 1/3 watt Audio amplifier stage
- PCB: high quality silk screened printed circuit board
- Power 12V DC Batteries or optional 12V Mains Adapter
- Coverage: Broadcast Band / Medium Wave (Optional SW Coil Add-On Kit)
- Controls: Regeneration, Volume, Tuning
- Connections: Aerial, Earth, Speaker and Headphones

UK Designed

*Download the full manual from our web site **download manual* <http://www.6v6.co.uk/archive/manuals/iGen%20Max%20Manual.pdf>

Shipping UK - Items are sent Royal Mail or DHL.

Shipping International - Items are sent "Small Packet" or DHL
International. Insurance can be added if requested.

Combine your purchases and save on the shipping, please notify me at the
end of your first auction that your bidding on other items, when your ready
I'll combine the items into one shipment for you. Missing or Damaged Items

We take care to pack all items appropriately, and ship stuff all over the
world, so far nothing has gone missing or arrived damaged. Claims for
missing/damaged items will only be entertained if buyer has requested
insurance and recorded delivery. All larger or more expensive items will
always be shipped pre-insured by a courier and recorded, unless
specifically requested not to be by buyer.

Hi

Thanx
73 de Jordan ve7jjd

On Tue, May 30, 2017 at 2:45 PM, Jordan Dobrikin <jjdobrikin@...>
wrote:

> Hi
> It will be interesting to see the responses.
> Since the original invention used Tubes and Tickler Coil I suspect the
> majority of modern Designs and Homebrews followed suit.
> I suggest surfing Ebay for a low cost medium high voltage wallwart.
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> 73 de Jordan ve7jjd
> https://www.google.ca/search?q=tube+regenerative+receiver&sa
> =X&biw=1088&bih=503&tbm=isch&tbo=u&source=univ&ved=0ahUKEwj
> Dja-75ujQAhUM8WMKHe-xBJkQsAQIGQ
> http://www.qsl.net/wd4nka/TEXTS/1948Rf.HTM
>
> http://makearadio.com/others/regenrx.php
> http://www.vk6fh.com/vk6fh/12au7regen.htm
> http://members.iinet.net.au/~cool386/kits/ace.html
> https://www.youtube.com/watch?v=orSlJ9oJ3d0 Part 1
> https://www.youtube.com/watch?v=9O6qUY7X4VA Part 2
>
> https://www.google.ca/search?q=Signal+Generator+schematics&
> espv=2&tbm=isch&tbo=u&source=univ&sa=X&ved=0ahUKEwjx6NGSu6_
> TAhUH1GMKHauuBn0Q7AkITQ&biw=1098&bih=512#imgrc=RYERYYYreqWpbM:
>
>
> Thanx
> 73 de Jordan ve7jjd
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> regenrx@yahoogroups.com> wrote:
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>> 12AU7.
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>> Overall, I think it's a worthwhile project.
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>> Ed AE7TE
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>> On May 30, 2017 21:45, "msalbert@... [regenrx]" <
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>>
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>>> I've been looking at some low voltage regen designs, and noticed that
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>>> http://www.skywaves.ar88.net/homebrew/12Vregen.htm
>>> http://www.qsl.net/kl7h/12v.htm
>>> (QST also published a low-voltage, space charge tube superhet/regen
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>>> These are mostly using 12 volt space charge tubes. I'm attempting get
>>> one going using a 32 volt DC supply using only junk box parts. I've given
>>> myself a limitation of that's the highest voltage I can use; hopefully that
>>> allows me to enter the standardish-tube realm. My plan is to start with a
>>> 9GH8 tube, using the pentode as the detector and triode for audio
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>>> to make up the heater string. . . . 6GK5 as a GG RF amp and 15CW5 (aka
>>> PL84) audio amp stages . . . end result being a 1-v-2.
>>>
>>> I welcome any comments / suggestions; thanks!
>>>
>>> Regards,
>>> Mark KB9VKE
>>>
>>>
>>
>
>

28233. RE: [regenrx] hartley low-voltage regen?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-31 04:04:49 UTC
From: Hubert Miller
Topic: 28229 Message: 28233

Jordan, thanks for posting this. I was predisposed to be very skeptical of such a kit, but I'm actually impressed, at least by what I read.
The company is generous for sharing the complete manual online. I copied the schematic for my files even if I don't get the kit – but
I am curious enough about the performance that I probably will buy it. I recall that when Ramsey was a going company their online
manuals had a blank page where the schematic was.
I note that altho this kit has an RF amp stage, there's no attenuation control. Maybe at 12 volts B+ the gain is so low it's not a big
problem, and also it talks about 10 to 30 foot antenna.
The only thing I could ask for is for a kind of front panel, made of PC material soldered to the "floor" PC, like the way I think Howes
kits do.
-Hue

>Hi
FYI
73 de Jordan ve7jjd

http://www.ebay.com/itm/172673096275?_trksid=p2060353.m1438.l2649&ssPageName=STRK%3AMEBIDX%3AIT

iGen-Max Two Tube Regenerative Radio Kit ! (Version 4 - New for Jan 2014)

Tube regenerative receiver based on original 1930's design, with a modern twist, Varactor tuning and a solid state audio amplifier.

28234. Re: hartley low-voltage regen?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-31 04:55:30 UTC
From: les.au49@...
Topic: 28229 Message: 28234

Hello Mark,

On this list you'll find a description of a simple receiver that runs from a 36V B+ supply. Search, using the keys Hartley + Coro. That's "our" prof. - Arnie Coro! This advice is very good.

I built a set along the line Arnie suggested - with some mods. This is what I got.

A Jones superhet - frequency converter/mixer + regen detector + AF (buffer) stage.
Mixer: 6AK5, similar in design to that shown on David Newkirk's page (so 7 pin tube, not octal).

Regen detector, following Prof Coro's description. Hartley config. Regen control: A 20k pot in supply line to grid #2. I followed David Newkirk's advice: the reactance of my tank circuit components is about 125 ohms at the I.F. frequency. My I.F. is/was 2015khz. The detector performs as Prof Coro described in his posting. It is sensitive; the regen control is silky-smooth. My B+ supply is +36V regulated.
I use a regulated supply. Bill Cromwell told me, "Les, you must use a regulated supply!" So I did.

Then, following the detector I have an emitter follower to buffer the signal. This means I can drive a low-Z transistor amplifier without degrading the signal. So (either) hi-Z phones or an AF amp.
Solid state AF amp. (I think Prof Coro is shaking his head when he reads I'm using transistors!).

Now astute readers will say, "Les, Les, you have a converter, but no local oscillator!" True - I didn't write about this. My LO is solid state. (Sigh.) Now to comment about performance.

My interest is AM BC band and 80m. With a short aerial (perhaps 6m - indoors) I hear a 10kW station at the low end of the BC band that is about 100km distant. Any time of day. On 80m I can hear 1500km up and down the east coast of Australia in the evening. I run the filaments (wired in series) from the B+ supply using the appropriate dropping resistor.

Would I build this design again? Ummm .... definitely, yes, but I'd probably pick a regulated 24V DC supply and boost the B+ line to 48V. I would build the power supply (and AF amplifier) on a separate chassis. I wouldn't use +12V for the B+ line if I could avoid it. That low voltage is a novelty. Running a "tube" set on 12V is like driving a Gogomobile. It will get you there, but why not use a normal, garden variety, car? If you want to use your set away from the mains, use a 6/12V filament supply and invert the battery to +45, +60V or +90V. You set will perform much better on a 45V supply than on a 12V supply.

That's my experience. One final word. When you build your set, focus on solid construction. Use high quality parts. Build a solid (metal) front panel. Put your finished set in a box that shields it from drafts and breezes. Use heavy wire that can't wiggle or wobble. Forget

you're building a 2 or 3 tube set. Build it as if you're building a 10 tube "special". Use an expensive dial. You won't be disappointed.

Les

28235. Re: [regenrx] hartley low-voltage regen?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-31 09:09:33 UTC
From: hornpipe112@...
Topic: 28229 Message: 28235

Manual link does not work nor can I find it on your website
John

28236. Re: [regenrx] hartley low-voltage regen?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-31 10:07:03 UTC
From: Michael
Topic: 28229 Message: 28236

No problem with 'bay and manual links here.

http://www.ebay.com/itm/172673096275?_trksid=p2060353.m1438.l2649&ssPageName=STRK%3AMEBIDX%3AIT

Nice design, almost EMP-proof :-) I would probably have
omitted the RF amp and used a second valve for AF - as I
did in my pre-shaving era, with a 22.5v HT battery.

Michael
2E0IHW
.....

On 31.05.17 10:09, hornpipe112@... [regenrx] wrote:
> Manual link does not work nor can I find it on your website
> John
> Posted by: hornpipe112@...

28237. ABOUT REGENERATIVE RECEIVER CIRCUIT FOR OPTIMUM OPERATING VOLTAGE

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-31 10:57:51 UTC
From: Prof. Arnaldo Coro Antich
Topic: 28237 Message: 28237

Hi amigos ! Link does not work here , it comes back

with ¨access denied¨ WHY ? I cannot tell...

Please send the diagram to:

arnaldo dot coro at gmail dot com (sent this way to avoid bots from using the address...

The voltage fed to the detector tube's plate should be at least 36 volts regulated (using three 12 volts zener diodes in series... For a bit more audio output add one more 12 volts zener diode to provide 48 volts... Screen grid regeneration control with a multi turns potentiometer provides silk smooth approach to the critical operating point required for CW and SSB reception. By the way, the receiver picks up digital modes like PSK31 with good stability. You can use a triode/tetrode or pentode audio tube like ECL82 for room filling volume with a loudspeaker

73 and DX

Arnie Coro

CO2KK

28238. Re: [regenrx] hartley low-voltage regen?c EBAY short URL

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-31 12:52:17 UTC
From: Rob
Topic: 28229 Message: 28238

Just a tidbit note about EBAY URLs.

EVERY item on ebay can be accessed by their unique ITEM number which
appears next to
/itm/

so you can leave off everything after the "?" when sharing EBAY items.

http://www.ebay.com/itm/172673096275

On 05/31/2017 06:07 AM, Michael michael.setaazul@...
[regenrx] wrote:
>
> No problem with 'bay and manual links here.
>
> http://www.ebay.com/itm/172673096275?_trksid=p2060353.m1438.l2649&ssPageName=STRK%3AMEBIDX%3AIT
>
>
> Nice design, almost EMP-proof :-) I would probably have
> omitted the RF amp and used a second valve for AF - as I
> did in my pre-shaving era, with a 22.5v HT battery.
>
> Michael
> 2E0IHW
> ....
>
> On 31.05.17 10:09, hornpipe112@... [regenrx] wrote:
> > Manual link does not work nor can I find it on your website
> > John
> > Posted by: hornpipe112@...
>
>

28239. Re: [regenrx] hartley low-voltage regen?c EBAY short URL

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-31 13:24:42 UTC
From: Ottavio Caruso
Topic: 28229 Message: 28239

I don't understand what frequency/ies this kit receives.

28240. Re: [regenrx] hartley low-voltage regen?c EBAY short URL

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-31 13:30:07 UTC
From: Michael
Topic: 28229 Message: 28240

VERY useful hint, Rob. Thanks!

Michael
2E0IHW
.....

On 31.05.17 13:52, Rob roomberg@... [regenrx] wrote:
> Just a tidbit note about EBAY URLs.
>
> EVERY item on ebay can be accessed by their unique ITEM number > which appears next to /itm/
> so you can leave off everything after the "?" when sharing EBAY items.
> http://www.ebay.com/itm/172673096275

28241. Re: [regenrx] hartley low-voltage regen?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-31 14:54:21 UTC
From: Jordan Dobrikin
Topic: 28229 Message: 28241

Hi Hue Thanx for the Response. I a looking further into the Kit for my
Seniors SWL Scanner Clubs STEAMPUNK Radios project(s).
Antique Components and modern electronics for Objets d'art and a simple
but highly functional Radio,Crystal, Regenerative & TRF.

Hi Group
Three new topics
A) Has anyone tried to convert a Grid Dip Meter into a Radio?
B) Can any assist with a simple semiconductor circuit to use in converting
some Antique TRF Radios with 3 Tuned RF Stages?
I am thinking of Radio on a Chip for Detector and Audio.
C) Speaking of Radios on a Chip is there a way to make it an RF Amplifier
by not shunting off the RF to ground?
73 de Jordan ve7jjd

http://makearadio.com/tube/eicoflex.php

https://www.google.ca/search?q=Signal+Generator+schematics&espv=2&tbm=isch&tbo=u&source=univ&sa=X&ved=0ahUKEwjx6NGSu6_TAhUH1GMKHauuBn0Q7AkITQ&biw=1098&bih=512#imgrc=RYERYYYreqWpbM

Hi

Thanx
73 de Jordan ve7jjd

On Wed, May 31, 2017 at 3:07 AM, Michael michael.setaazul@...
[regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> No problem with 'bay and manual links here.
>
> http://www.ebay.com/itm/172673096275?_trksid=p2060353.
> m1438.l2649&ssPageName=STRK%3AMEBIDX%3AIT
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> Nice design, almost EMP-proof :-) I would probably have
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> Michael
> 2E0IHW
> ....
>
> On 31.05.17 10:09, hornpipe112@yahoo.com [regenrx] wrote:
> > Manual link does not work nor can I find it on your website
> > John
> > Posted by: hornpipe112@...

>
>

28242. Re: hartley low-voltage regen?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-31 16:32:14 UTC
From: Jerome Wysocki
Topic: 28229 Message: 28242

Actually, the last reference (link) above shows such a circuit with no tickler coil. The author used an old ARC-5 type of tapped coil, but equivalent dimensions are given in terms of form diameter, number of coil turns, and tap. I will be building that same circuit in the near future and will try to fine tune the design even more.

I found a similar circuit from the 1935 ARRL Handbook and built it, as is. I found it regenerated fine even with a plate voltage of 32 volts, D.C. I then built another version to fine tune the design even better. I replaced the 6D6 with a 6SK7, and the 76 with a 6J5. I used a discarded 32 volt D.C. power brick from an old printer, and a 6 volt D.C. power brick for the filaments. It worked out so well I am considering further refinements so I could use it as part of a homebrew QRP rig for 40m.

By the way, the ARRL used this same circuit in the 1936 Handbook. It can be Googled and downloaded from the Internet.

Jerry Wysocki, KC9JXE

Sent from my iPad

28243. Re: hartley low-voltage regen?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-31 19:20:46 UTC
From: les.au49@...
Topic: 28229 Message: 28243

Hello Ottavio.

In spec section the ad says: "Coverage: Broadcast Band / Medium Wave (Optional SW Coil Add-On Kit)"

Les (in AU).

28244. Re: [regenrx] Re: hartley low-voltage regen?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-31 21:18:06 UTC
From: msalbert@...
Topic: 28229 Message: 28244
Attachments: 1 described; binary payloads are missing from this source WARC

Thanks for all the comments! Attached is a partial PDF of the 1936 ARRL Handbook, showing what I think is the receiver Jerry mentioned. Glad to hear it worked at 32 volts, just what I have in mind! Regards, Mark KB9VKE
-----Original Message----- From: Jerome Wysocki jeromewysocki48@... [regenrx] To: regenrx Sent: Wed, May 31, 2017 2:16 pm Subject: [regenrx] Re: hartley low-voltage regen? Actually, the last reference (link) above shows such a circuit with no tickler coil. The author used an old ARC-5 type of tapped coil, but equivalent dimensions are given in terms of form diameter, number of coil turns, and tap. I will be building that same circuit in the near future and will try to fine tune the design even more. I found a similar circuit from the 1935 ARRL Handbook and built it, as is. I found it regenerated fine even with a plate voltage of 32 volts, D.C. I then built another version to fine tune the design even better. I replaced the 6D6 with a 6SK7, and the 76 with a 6J5. I used a discarded 32 volt D.C. power brick from an old printer, and a 6 volt D.C. power brick for the filaments. It worked out so well I am considering further refinements so I could use it as part of a homebrew QRP rig for 40m. By the way, the ARRL used this same circuit in the 1936 Handbook. It can be Googled and downloaded from the Internet. Jerry Wysocki, KC9JXE Sent from my iPad
---------- Posted by: Jerome Wysocki <jeromewysocki48@...>
---------- "In the interest of Regenerating radio's lost art of Regeneration" ---------- Yahoo Groups Links
http://groups.yahoo.com/group/regenrx/ Individual Email | Traditional
http://groups.yahoo.com/group/regenrx/join (Yahoo! ID required)
regenrx-digest@yahoogroups.com regenrx-fullfeatured@yahoogroups.com
regenrx-unsubscribe@yahoogroups.com https://info.yahoo.com/legal/us/yahoo/utos/terms/

28245. New file uploaded to regenrx

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-31 21:52:53 UTC
From: regenrx@yahoogroups.com
Topic: 89 Message: 28245

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the regenrx
group.

File : /Blue Grass Radio/Home Brewed Digitally Controlled VFO/Digitally-Stabilized-VFO.zip
Uploaded by : bluegrass_radio <danieljackson@...>
Description : LTSpice simulations of the digitally controlled VFO.

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/regenrx/files/Blue%20Grass%20Radio/Home%20Brewed%20Digitally%20Controlled%20VFO/Digitally-Stabilized-VFO.zip

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

bluegrass_radio <danieljackson@...>

28246. RE: [regenrx] Re: hartley low-voltage regen? [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-31 22:06:35 UTC
From: Hubert Miller
Topic: 28229 Message: 28246

What did you use for the audio inductor? I am pretty certain you didn't find a 500H choke. (actually, I suspect, even without hard numbers, that a good portion of the old audio inductors are gone bad by now – the combination of very thin wire, like #38 to #40, and acidic elements in the
insulation or solder flux.)
-Hue

>I found a similar circuit from the 1935 ARRL Handbook and built it, as is. I found it regenerated fine even with a plate voltage of 32 volts, D.C. I then built another version to fine tune the design even better. I replaced the 6D6 with a 6SK7, and the 76 with a 6J5. I used a discarded 32 volt D.C. power brick from an old printer, and a 6 volt D.C. power brick for the filaments. It worked out so well I am considering further refinements so I could use it as part of a homebrew QRP rig for 40m.
By the way, the ARRL used this same circuit in the 1936 Handbook. It can be Googled and downloaded from the Internet.
Jerry Wysocki, KC9JXE

28247. Re: [regenrx] Re: hartley low-voltage regen?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-31 22:58:01 UTC
From: Jordan Dobrikin
Topic: 28229 Message: 28247

Hi
Can/Will any one redraw Schematic using conventional North American style?

http://www.6v6.co.uk/archive/manuals/iGen%20Max%20Manual.pdf
Thanx
73 de Jordan ve7jjd

Hi

Thanx
73 de Jordan ve7jjd

On Wed, May 31, 2017 at 3:06 PM, Hubert Miller kargo_cult@... [regenrx]
<regenrx@...m> wrote:

>
>
> What did you use for the audio inductor? I am pretty certain you didn't
> find a 500H choke.
>
> (actually, I suspect, even without hard numbers, that a good portion of
> the old audio inductors are gone bad by now – the combination of very thin
> wire, like #38 to #40, and acidic elements in the
>
> insulation or solder flux.)
>
> -Hue
>
>
>
>
>
> >I found a similar circuit from the 1935 ARRL Handbook and built it, as
> is. I found it regenerated fine even with a plate voltage of 32 volts, D.C.
> I then built another version to fine tune the design even better. I
> replaced the 6D6 with a 6SK7, and the 76 with a 6J5. I used a discarded 32
> volt D.C. power brick from an old printer, and a 6 volt D.C. power brick
> for the filaments. It worked out so well I am considering further
> refinements so I could use it as part of a homebrew QRP rig for 40m.
> By the way, the ARRL used this same circuit in the 1936 Handbook. It can
> be Googled and downloaded from the Internet.
> Jerry Wysocki, KC9JXE
>
>
>

28248. Re: [regenrx] Re: hartley low-voltage regen? JPG not PDF

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-31 23:37:38 UTC
From: Rob
Topic: 28229 Message: 28248

Does this help?

http://www.learnmorsecode.com/regen5/iGenREGEN.jpg

On 05/31/2017 06:58 PM, Jordan Dobrikin jjdobrikin@... [regenrx]
wrote:
> Hi
> Can/Will any one redraw Schematic using conventional North American
> style?
>
> http://www.6v6.co.uk/archive/manuals/iGen%20Max%20Manual.pdf
> Thanx
> 73 de Jordan ve7jjd
>
> Hi
>
>
>
>
> Thanx
> 73 de Jordan ve7jjd
>
> On Wed, May 31, 2017 at 3:06 PM, Hubert Miller kargo_cult@...
> <mailto:kargo_cult@...> [regenrx] <regenrx@yahoogroups.com
> <mailto:regenrx@yahoogroups.com>> wrote:
>
> What did you use for the audio inductor? I am pretty certain you
> didn't find a 500H choke.
>
> (actually, I suspect, even without hard numbers, that a good
> portion of the old audio inductors are gone bad by now – the
> combination of very thin wire, like #38 to #40, and acidic
> elements in the
>
> insulation or solder flux.)
>
> -Hue
>
> >I found a similar circuit from the 1935 ARRL Handbook and built
> it, as is. I found it regenerated fine even with a plate voltage
> of 32 volts, D.C. I then built another version to fine tune the
> design even better. I replaced the 6D6 with a 6SK7, and the 76
> with a 6J5. I used a discarded 32 volt D.C. power brick from an
> old printer, and a 6 volt D.C. power brick for the filaments. It
> worked out so well I am considering further refinements so I could

> use it as part of a homebrew QRP rig for 40m.
> By the way, the ARRL used this same circuit in the 1936 Handbook.
> It can be Googled and downloaded from the Internet.
> Jerry Wysocki, KC9JXE
>
>
>

28249. Re: [regenrx] Re: hartley low-voltage regen? JPG not PDF

Yahoo group: regenrx (2016 — 2017)
Date: 2017-05-31 23:56:41 UTC
From: Jordan Dobrikin
Topic: 28229 Message: 28249

Hi
Thanx but really.
I want to see the coil(s) Daughter board components in the laid out in the Schematic(s)
73 de Jordan ve7jjd

Hi

Thanx
73 de Jordan ve7jjd

On Wed, May 31, 2017 at 4:37 PM, Rob roomberg@... [regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> Does this help?
>
> http://www.learnmorsecode.com/regen5/iGenREGEN.jpg
>
>
>
> On 05/31/2017 06:58 PM, Jordan Dobrikin jjdobrikin@... [regenrx]
> wrote:
>
>
> Hi
> Can/Will any one redraw Schematic using conventional North American style?
>
> http://www.6v6.co.uk/archive/manuals/iGen%20Max%20Manual.pdf
> Thanx
> 73 de Jordan ve7jjd
>
> Hi
>
>
>
>
> Thanx
> 73 de Jordan ve7jjd
>
> On Wed, May 31, 2017 at 3:06 PM, Hubert Miller kargo_cult@...
> [regenrx] <regenrx@yahoogroups.com> wrote:
>
>>
>>

>> What did you use for the audio inductor? I am pretty certain you
>> didn't find a 500H choke.
>>
>> (actually, I suspect, even without hard numbers, that a good portion of
>> the old audio inductors are gone bad by now – the combination of very thin
>> wire, like #38 to #40, and acidic elements in the
>>
>> insulation or solder flux.)
>>
>> -Hue
>>
>>
>>
>>
>>
>> >I found a similar circuit from the 1935 ARRL Handbook and built it, as
>> is. I found it regenerated fine even with a plate voltage of 32 volts, D.C.
>> I then built another version to fine tune the design even better. I
>> replaced the 6D6 with a 6SK7, and the 76 with a 6J5. I used a discarded 32
>> volt D.C. power brick from an old printer, and a 6 volt D.C. power brick
>> for the filaments. It worked out so well I am considering further
>> refinements so I could use it as part of a homebrew QRP rig for 40m.
>> By the way, the ARRL used this same circuit in the 1936 Handbook. It can
>> be Googled and downloaded from the Internet.
>> Jerry Wysocki, KC9JXE
>>
>>
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>
>

28250. RE: [regenrx] Re: hartley low-voltage regen?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-01 01:42:16 UTC
From: Hubert Miller
Topic: 28229 Message: 28250

This, my addendum to the online manual, may help a wee bit. But I'm not going to draw out a clarified schematic for you.

RF daughter board……... Detector daughter board
(schematic coil contact # / daughter board alpha named contact)

1 B…… antenna winding, bottom…….feedback winding bottom
2 A…….antenna winding, top……..feedback winding top
3 C (CX)……. varactor……varactor
4 D (CX)……..RF tube grid……detector tube grid
5 E…….tuning coil, top. (5E connects to 4D)……..tuning coil top
6 F…… ground; tuning coil bottom……..tuning coil bottom

For the MW broadcast band, you wire a jumper across the CX connection (3C to 4D). The inductors are axial lead miniature inductors
180 uH, all four windings. Kind of odd that the feedback winding is the same as the tuned circuit instead of the usual percentage of the
tuned coil, but maybe the lessened gain of the tube at these voltages doesn't make that quite so squirrely. The feedback and det inductors
are bent closer or farther apart to get the feedback in the right range. For the shortwave coils, CX connections have instead a 470 pF
installed, to decrease the tuning range to better accommodate the lack of any fine tuning control.
I would like to see what the 6-pin sub board connector looks like. I have no idea what style it is, is it an off the shelf IC connector?
via: Hue

28251. Re: [regenrx] Re: hartley low-voltage regen?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-01 04:26:39 UTC
From: Jerome Wysocki
Topic: 28229 Message: 28251

Yes, this is the same circuit, as in the 1935 ARRL Handbook. Hue had a question about the 500 h audio choke. I just grabbed an old audio output transformer from the junk box and used it as the audio choke. It came from a five tube AC/DC broadcast radio, which used a 50L6 tube, as audio output. I used only the primary winding as the audio choke, leaving the secondary winding unconnected. It worked fine.
Also, I eliminated R4, a 25,000 ohm, 2 watt resistor. R4 is necessary at higher B+ plate voltages, but was eliminated here because I was using only 32 VDC for my plate voltage. Since I was powering the tube filaments with 6 VDC, I eliminated the resistor across the filaments, and powered the filaments directly.
... Jerry Wysocki, KC9JXE

Sent from my iPad

28252. RE: [regenrx] Re: Hartley low-voltage regen?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-01 04:42:02 UTC
From: Hubert Miller
Topic: 28252 Message: 28252

OOPS, must proofread, I had exchanged A and B on the plugins.

RF daughter board……... Detector daughter board
(schematic coil contact # / daughter board alpha named contact)

1 A…… antenna winding, top…….……..feedback winding bottom
2 B…….antenna winding, bottom..……..feedback winding top
3 C (CX)……. varactor……varactor
4 D (CX)……..RF tube grid……detector tube grid
5 E…….tuning coil, top. (5E connects to 4D)……..tuning coil top
6 F…… ground; tuning coil bottom……..tuning coil bottom

For the MW broadcast band, you wire a jumper across the CX connection (3C to 4D). The inductors are axial lead miniature inductors
180 uH, all four windings. Kind of odd that the feedback winding is the same as the tuned circuit instead of the usual percentage of the
tuned coil, but maybe the lessened gain of the tube at these voltages doesn't make that quite so squirrely. The feedback and det inductors
are bent closer or farther apart to get the feedback in the right range. For the shortwave coils, CX connections have instead a 470 pF
installed, to decrease the tuning range to better accommodate the lack of any fine tuning control.

Pretty clever to use the plugin PC board for the tuning elements. I took a better look at the Ebay photos, which I really should have scrutinized
in the first place. There is enough info there you could build it from scratch. Looks like the DL96 tube is pretty similar to the 1L4 except the
DL96 has tapped filament for 3 or 1.5 volt option.
-Hue

28253. RE: [regenrx] Re: hartley low-voltage regen?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-01 04:48:01 UTC
From: Hubert Miller
Topic: 28229 Message: 28253

Interesting that the lower inductance choke worked out so well. I am guessing, purely guessing, the output transformer is maybe 5-10 H. I was going to see what the inductance of the high voltage windings of some power transformers was, like old scope transformers with a thousand volt winding. I measured the inductance of some 400 Hz power transformer HV secondaries and they were in the range 30-40H. Made me look at 400 Hz power transformers in a new way.
I have one of this circuit breadboarded from way back then. I think maybe someone soldered it with the wrong kind of solder because all the contacts are corroded and need renewing.
-H

>Yes, this is the same circuit, as in the 1935 ARRL Handbook. Hue had a question about the 500 h audio choke. I just grabbed an old audio output transformer from the junk box and used it as the audio choke. It came from a five tube AC/DC broadcast radio, which used a 50L6 tube, as audio output. I used only the primary winding as the audio choke, leaving the secondary winding unconnected. It worked fine.
Also, I eliminated R4, a 25,000 ohm, 2 watt resistor. R4 is necessary at higher B+ plate voltages, but was eliminated here because I was using only 32 VDC for my plate voltage. Since I was powering the tube filaments with 6 VDC, I eliminated the resistor across the filaments, and powered the filaments directly.
... Jerry Wysocki, KC9JXE

28254. RE: [regenrx] Re: hartley low-voltage regen?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-01 05:55:19 UTC
From: Jerome Wysocki
Topic: 28229 Message: 28254

Hue, you are probably correct on your estimation of the inductance of my junk box audio transformer, used here as an audio choke. I read many years ago that the higher the inductance of this choke, the higher would be the expected audio output in the headphones. One could also obtain higher audio volume by use of a pentode, instead of a triode, for audio output. On my recent breadboard experimental version of this receiver, I will incorporate that idea.

I'm now using a tuning capacitor from an old ARC-5 type transmitter (junked 50 years ago, from a unit with bullet holes in the enclosure case from WW2!) as the main tuning capacitor in my most recent breadboard build of this receiver. This capacitor is rugged, and has a nice vernier dial mechanism, built in. It almost make the bandspread variable capacitor, unnecessary. I'm using 14 gauge solid copper wire for all detector wiring, to improve stability of the circuit. The RF choke is also from the junk box, and physically appears to be the same size as a typical 2.5 mh, 50 ma choke.

I also placed a small variable capacitor in series with the antenna. (This was not shown in the original 1936 schematic diagram.) This capacitor helps somewhat to reduce coupling and signal strength thus minimizing overload on strong signals.

The adventure continues!

... Jerry Wysocki, KC9JXE

Sent from my iPad

28255. microVacar receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-01 09:19:36 UTC
From: astongoldsmith@...
Topic: 28255 Message: 28255
Attachments: 1 described; binary payloads are missing from this source WARC

Inspired by post of seanvn from Theradioboard
i made modification so i can pick up VHF with this small receiver.

28256. Re: microVacar receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-01 10:53:23 UTC
From: Ottavio Caruso
Topic: 28255 Message: 28256

Could you please reference the original article? And what frequencies can you pick? And what modes? I was looking for a simple receiver for the 2 meters.

28257. Re: microVacar receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-01 11:46:10 UTC
From: pmartin45601@...
Topic: 28255 Message: 28257

I, too, am interested.

28258. Re: [regenrx] Re: hartley low-voltage regen? [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-02 03:54:35 UTC
From: msalbert@...
Topic: 28229 Message: 28258
Attachments: 1 described; binary payloads are missing from this source WARC

Some progress on the 30-volt regen… Audio stages are hooked up and working, see attached schematic. The total gain wide-open is 60 dB. I might need a volume Control…?
Both B+ and heater are fed from an old 30 V printer power supply.
Regards,
Mark

28259. Re: microVacar receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-02 09:32:43 UTC
From: astongoldsmith@...
Topic: 28255 Message: 28259

Martin & Caruso
original post is from thereadioboard forum by seanvn
http://theradioboard.com/rb/viewtopic.php?f=4&t=7686
http://theradioboard.com/rb/viewtopic.php?f=4&t=7686
also you may visit my forum on ;
http://euradioboard.createmybb3.com/ http://euradioboard.createmybb3.com/

28260. Re: microVacar receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-02 11:12:21 UTC
From: Ottavio Caruso
Topic: 28255 Message: 28260

Roger that, but what frequencies on vhf did you tune?

On Friday, 2 June 2017, astongoldsmith@... [regenrx] <
regenrx@yahoogroups.com> wrote:

>
>
> Martin & Caruso
> original post is from thereadioboard forum by seanvn
> http://theradioboard.com/rb/viewtopic.php?f=4&t=7686
> also you may visit my forum on ;
> http://euradioboard.createmybb3.com/
>
>

28261. Re: hartley low-voltage regen?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-03 16:30:59 UTC
From: msalbert@...
Topic: 28229 Message: 28261

Yay, I can say it's actually a radio now! Last night hooked up the 9GH8 pentode as the regen stage, and I heard broadcasters on 49 meters, about as loud as I expect. I can hear them well enough to ID (RHC for example) but still needs some work; audio is distorted. It's at the prototype stage, built tumbleweed style on an old AA5 chassis, with whatever wire and parts happen to be within reach. So getting up and making another trip to the junk boxes may improve things ;-) I did use the Hartley oscillator . . . I like them since there's one less chance of a wiring error.

My goals for this project are to get headset volume from low voltage using tubes, and to not use anything I bought new. So I have the odd-ball TV tubes, cap from an old AM/FM tuner, coil wound on a pill bottle, and other parts from various junked devices. Now I'm looking at the big knurled lid from a peanut butter jar and trying to imagine how to make it into a nice tuning knob ;-)

Regards,
MarkKB9VKE

28262. Re: hartley low-voltage regen?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-03 20:04:04 UTC
From: msalbert@...
Topic: 28229 Message: 28262

Yay, I can say it's actually a radio now! Last night hooked up the 9GH8 pentode as the regen stage, and I heard broadcasters on 49 meters, about as loud as I expect. I can hear them well enough to ID (RHC for example) but still needs some work; audio is distorted. It's at the prototype stage, built tumbleweed style on an old AA5 chassis, with whatever wire and parts happen to be within reach. So getting up and making another trip to the junk boxes may improve things ;-) I did use the Hartley oscillator . . . I like them since there's one less chance of a wiring error.

My goals for this project are to get headset volume from low voltage using tubes, and to not use anything I bought new. So I have the odd-ball TV tubes, cap from an old AM/FM tuner, coil wound on a pill bottle, and other parts from various junked devices. Now I'm looking at the big knurled lid from a peanut butter jar and trying to imagine how to make it into a nice tuning knob ;-)

Regards,
MarkKB9VKE

28263. Re: hartley low-voltage regen?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-04 04:18:48 UTC
From: Jerome Wysocki
Topic: 28229 Message: 28263

Yes, Mark, you have the right idea. Build your radio with whatever parts you can find that work from your junk box. As long as it eventually works as well as you expect it to, and you are happy with it, who cares what it looks like.
My junk box has been growing for the last 50 plus years, and now takes up a large chunk of my basement. I've used my junk box a lot for parts to build similar devices. For example, in my version of the two tube regenerative radio from the 1935 ARRL handbook that I described here on this group, all parts came from my junk box.
My latest refinements in that circuit, after going from a 6D6 to a 6SK7, and a 76 to a 6J5 tube was to replace the 6J5 (single triode) with a 6SN7 (dual triode) for an extra stage of audio (after adding appropriate circuitry for the added triode section). This worked out so well I had to add a volume control so I don't blast my ears off when listening to strong signals with headphones. Not sure if this will adequately drive a speaker yet, but that is my next experiment (and an easy one, at that).
Junk boxes are great! I just found a ten turn potentiometer of about the right value called for in the original circuit. I'm going to see if I can get ultra fine regeneration control by use of this part.
The nice thing about building such a circuit, bread board style, is that one can easily make changes in the prototype version, before finalizing the design for the "end product."
... To be continued...
Jerry, KC9JXE

Sent from my iPad

28264. Re: hartley low-voltage regen?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-04 06:43:11 UTC
From: krysatec@...
Topic: 28229 Message: 28264

Hi

some receivers with low voltage you can see here.

http://makearadio.com/visitors/index-jara.php
http://makearadio.com/visitors/index-jara.php

I built also MW/LW low voltage synchrodynes and other....

I use tubes: ECC88, 6F31, EF80, EF183, E180F...with 12V anode voltage.

best regards, Jara "Rat", Czech republic, EU

28265. Re: microVacar receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-04 07:39:23 UTC
From: astongoldsmith@...
Topic: 28255 Message: 28265

As you probably know that depend on L/C tank values
in my case with 100nH 20pF i can pick up FM and air band

28267. I'm curious if any of you regen folks can hear my beacon

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-05 02:59:23 UTC
From: Phil
Topic: 28267 Message: 28267

Hi all,

Last week I put my 10M beacon back on the air after having it off-line since January. I've already gotten feedback from Washington State (nearly nightly) and Arizona. Before taking it off air in January it was heard coast to coast, New Zealand, Australia and frequently into Hawaii.

Yeah, I do things 'bass-ackwards', have the beacon on when the sunspot cycle is poor and off when it's good. It's a Realistic HTX-100, pushing 25 Watts CW (20 Watts to antenna after 75' of coax loss). Antenna is a Cushcraft AR-10 Ringo about 14' above ground.

It's on 24/7 on 28.290MCs, keyed at about 11WPM.

To keep it on topic for this list, I'd be especially curious if anyone can hear it on their regen receiver???

--
73 From "The Beaconeer's Lair"
Specializing in DXing NDBs (Longwave Beacons)
Phil, KO6BB, http://www.qsl.net/ko6bb/
KO6BB/B beacon, ~20W on 28.290 MHz, Ringo Vertical

HF/LF RADIOS:
HOMEBREW: 7 Tube+Rect 1v3 Regen RX for LF (built 2015)
Icom: IC-7200 Xceiver, DSP IF & filters (~2015).
Kenwood: TS-450SAT Xceiver, cascaded 250/125Hz Inrad filters.
10M Beacon: Realistic HTX-100 on 28.290MHz
SDR: Softrock Ensemble II LF (built from a kit 2017).

ACC: HOMEBREW LF-MF Pre-Amp, 8Hz Audio Filter.
HOMEBREW 4 Port Antenna Multicoupler, Feeds 4 RX's.

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.
Cushcraft AR-10 Ringo Vertical, 14 feet AGL for 10M beacon.
Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

This email has been checked for viruses by AVG.
http://www.avg.com

28268. Re: [regenrx] I'm curious if any of you regen folks can hear my beacon

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-05 03:34:11 UTC
From: Jordan Dobrikin
Topic: 28267 Message: 28268

Hi
My newly forming Seniors SWL Scanning Club will try with several Radios.
Sony ICF 2010
Radio Shack DX 440
Sangean ATS 909X
And STEAMPUNK Crystal Radios and Regenerative Receivers.
Radios using Antique/Vintage components, with modern circuitry/electronics
to come up with Objets de arte as well as a highly functional Radio. We
are also working on a Westinghouse RADA; Radiola III and Radiola IIIA.
Trying to come up with a simple Solid State Transistor/Semiconductor
Circuit to replace Antique Hollow State Triodes 01A /226's
73 de Jordan ve7jjd

Hi

Thanx
73 de Jordan ve7jjd

On Sun, Jun 4, 2017 at 7:59 PM, Phil ko6bb1@... [regenrx] <
regenrx@...m> wrote:

>
>
> Hi all,
>
> Last week I put my 10M beacon back on the air after having it off-line
> since January. I've already gotten feedback from Washington State
> (nearly nightly) and Arizona. Before taking it off air in January it
> was heard coast to coast, New Zealand, Australia and frequently into
> Hawaii.
>
> Yeah, I do things 'bass-ackwards', have the beacon on when the sunspot
> cycle is poor and off when it's good. It's a Realistic HTX-100, pushing
> 25 Watts CW (20 Watts to antenna after 75' of coax loss). Antenna is a
> Cushcraft AR-10 Ringo about 14' above ground.
>
> It's on 24/7 on 28.290MCs, keyed at about 11WPM.
>
> To keep it on topic for this list, I'd be especially curious if anyone
> can hear it on their regen receiver???
>
> --
> 73 From "The Beaconeer's Lair"
> Specializing in DXing NDBs (Longwave Beacons)
> Phil, KO6BB, http://www.qsl.net/ko6bb/
> KO6BB/B beacon, ~20W on 28.290 MHz, Ringo Vertical

>
> HF/LF RADIOS:
> HOMEBREW: 7 Tube+Rect 1v3 Regen RX for LF (built 2015)
> Icom: IC-7200 Xceiver, DSP IF & filters (~2015).
> Kenwood: TS-450SAT Xceiver, cascaded 250/125Hz Inrad filters.
> 10M Beacon: Realistic HTX-100 on 28.290MHz
> SDR: Softrock Ensemble II LF (built from a kit 2017).
>
> ACC: HOMEBREW LF-MF Pre-Amp, 8Hz Audio Filter.
> HOMEBREW 4 Port Antenna Multicoupler, Feeds 4 RX's.
>
> ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
> Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
> 37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.
> Cushcraft AR-10 Ringo Vertical, 14 feet AGL for 10M beacon.
> Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh
>
> ---
> This email has been checked for viruses by AVG.
> http://www.avg.com
>
>
>

28269. Do regen-based transceivers radiate RF even when receiving?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-11 16:29:43 UTC
From: Ottavio Caruso
Topic: 28269 Message: 28269

Interesting topic on the GQRP mailing list, which I cannot link because it's not public, about the Pixie. (Yes I know, the Pixie is not a regen, but please read on!)

So, one the posters mentioned that he measured 800mw out at TX and 80mw out at RX.

As my theory skills are lacking, I asked why this happens and if it is normal, the answers I got were:

"Yes they do radiate on Rx. This is because the xtal oscillator is driving the PA transistor which is biased to a low current (about 1mA) & this is connected to the antenna via the low pass filter."

and:

"It is a characteristic of all direct conversion receivers and super-regenerative receivers because the local oscillator is in-band."

Now I assume the last poster meant regenerative instead of super regenerative, but in any case can anyone translate the statements above into plain English if possible?

Thanks.

--
Ottavio Caruso

28270. Re: [regenrx] Do regen-based transceivers radiate RF even when receiving?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-11 18:04:13 UTC
From: Bill Cromwell
Topic: 28269 Message: 28270

if the local oscillator is not isolated from the antenna it can radiate. By PA transistor I assume you meant the transmit final amp. That should biased well off during receive. I don't know anything about this radio or it's topology other than what you have said.

I have two regens that I use. One is a National SW-3 and the other is an RCA RAK-7. both of them have good isolation and shielding. I absolutely cannot detect the oscillating detector in the RAK with two rf amps (for isolation - not for weak signal amplification) and more shielding than the SW-3. The SW-3 has one RF amp and adequate shielding but less than the RAK. I can't detect the oscillating detector outside the cabinet but I can if put the snooping radio's antenna wire just inside the box near the detector's 'silo'.

Somebody's plain, straight through regen with no thought to shielding radiates a bit. How far is not really known. Submarine radio op to captain "captain there is a signal from a regen radio due east". Captain "maybe it's that one right over there" pointing at the ship 100 yards away. <evil grin>

73,

Bill KU8H

On 06/11/2017 12:29 PM, Ottavio Caruso ottavio2006-degen@... [regenrx] wrote:

> Interesting topic on the GQRP mailing list, which I cannot link because it's not public, about the Pixie. (Yes I know, the Pixie is not a regen, but please read on!)
>
>
> So, one the posters mentioned that he measured 800mw out at TX and 80mw out at RX.
>
> As my theory skills are lacking, I asked why this happens and if it is normal, the answers I got were:
>
> "Yes they do radiate on Rx. This is because the xtal oscillator is driving the PA transistor which is biased to a low current (about 1mA) & this is connected to the antenna via the low pass filter."
>
> and:
>
> "It is a characteristic of all direct conversion receivers and

> super-regenerative receivers because the local oscillator is in-band."
>
> Now I assume the last poster meant regenerative instead of super
> regenerative, but in any case can anyone translate the statements
> above into plain English if possible?
>
> Thanks.
>
>
> --
> Ottavio Caruso
>

--
bark less - wag more

28271. Re: [regenrx] Do regen-based transceivers radiate RF even when receiving?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-11 18:44:56 UTC
From: Rob
Topic: 28269 Message: 28271

My SMT PIXIE called a KNIGHTSMIGHT definitely spewed RF on 3.686Mhz
when receiving which could be heard on HF rigs in the shack.

On 06/11/2017 12:29 PM, Ottavio Caruso ottavio2006-degen@...
[regenrx] wrote:
>
> Interesting topic on the GQRP mailing list, which I cannot link
> because it's not public, about the Pixie. (Yes I know, the Pixie is
> not a regen, but please read on!)
>
>
> So, one the posters mentioned that he measured 800mw out at TX and
> 80mw out at RX.
>
> As my theory skills are lacking, I asked why this happens and if it is
> normal, the answers I got were:
>
> "Yes they do radiate on Rx. This is because the xtal oscillator is
> driving the PA transistor which is biased to a low current (about
> 1mA) & this is connected to the antenna via the low pass filter."
>
> and:
>
> "It is a characteristic of all direct conversion receivers and
> super-regenerative receivers because the local oscillator is in-band."
>
> Now I assume the last poster meant regenerative instead of super
> regenerative, but in any case can anyone translate the statements
> above into plain English if possible?
>
> Thanks.
>
>
> --
> Ottavio Caruso
>

28272. Re: Do regen-based transceivers radiate RF even when receiving?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-11 19:06:19 UTC
From: b_weeber@...
Topic: 28269 Message: 28272

Hello Ottavio

While receiving, the PA transistor is acting as a switching mixer. The oscillator is still driving the basis of the PA, while the emitter is not pulled to ground. I measured amplitudes between 50mV and 150mV at the antenna connector. This depends a little bit on the frequency and which pa transistor is used. Once i managed, to neutralize this radiation, but couldn't repeate it with another circuit.

** that he measured 800mw out at TX and 80mw out at RX

Using my measurements for calculation, the rx radiation should more likely be in a range of 50-150µW. But still annoying, if you like to listen to your own signal, using your station receiver.

All three (super-regen, regen-receiver in autodyne mode and DC-receiver) are radiating inside of the pass band. With exception of the super-regen this can cause hum, while receiving your own radiated signal again. The hum disappeares, when u use them in the nature / back packing and run it from a battery.

Best regards,
Bernd

28273. Re: [regenrx] Do regen-based transceivers radiate RF even when receiving?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-11 19:52:34 UTC
From: Ottavio Caruso
Topic: 28269 Message: 28273

Bill et al,

The circuit is here:

http://www.m0zpk.co.uk/wp-content/uploads/2015/05/20150502_141304-1.jpg

--
Ottavio Caruso

28274. Re: Do regen-based transceivers radiate RF even when receiving?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-11 19:54:40 UTC
From: Ottavio Caruso
Topic: 28269 Message: 28274

Edit: I assume Q2 is the power amplifier that leaks RF?

On Sunday, 11 June 2017, Ottavio Caruso <ottavio2006-degen@...> wrote:

> Bill et al,
>
> The circuit is here:
>
> http://www.m0zpk.co.uk/wp-content/uploads/2015/05/20150502_141304-1.jpg
>
>
> --
> Ottavio Caruso
>

--
Ottavio Caruso

28275. Re: Do regen-based transceivers radiate RF even when receiving?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-11 20:49:20 UTC
From: g3nby@...
Topic: 28269 Message: 28275

Yes... When the detector is adjusted to receive CW, it oscillates to provide a signal against which the incoming CW can heterodyne and make the audible sound of morse.. This signal also radiates as well as detecting.
With modern solid state, it still happens but the power is very low and not a serious problem. However the old valve / tube versions entailed QRP transmit levels of power which radiates via the antenna.
Today it would be a nuisance if heard just as a standing weak carrier but when these circuits were used in clandestine communications during WW2, it was a signal on which the enemy could carry out direction finding techniques, "Homing" often to the downfall of the operator who kept transmissions short for the same reason but left the Rx running steadily whilst monitoring a pre- agreed freq. and awaiting a pre-arranged time sked.

On AM this stage gives lots of RF gain but is just below the oscillating level and does not radiate.
The answer was a fully screened regen rx but with an RF amplifier (even low gain) which prevented
regen. RXs from radiating & thus revealing its location.

Regen. is an early version of Direct Conversion.
Modern DC receivers simply have a separate VFO to inject into the mixer and not the detector "regenerating" and mixing in itself.
Nonetheless the oscillator would need to be taken into design if radiation were to be avoided although the previously mentioned very low power would possibly make it insignificant unless the man next door were also
a ham operator, listening on the same QRG!

73 Howard G3NBY

28276. Re: Do regen-based transceivers radiate RF even when receiving?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-11 21:17:29 UTC
From: b_weeber@...
Topic: 28269 Message: 28276

Yes, the base collector capacity of Q2 is coupling a small portion of the oscillator signal to the antenna.

28277. RE: [regenrx] Re: Do regen-based transceivers radiate RF even when receiving?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-11 21:20:52 UTC
From: Hubert Miller
Topic: 28269 Message: 28277

I can only think of one 'spy radio' used in Europe that had the antenna go right to the regen detector stage – the famous "Paraset", but it was only used
in small numbers, and maybe only in Norway; a very small minority of the total variety and number of spy radios used in the European war. The rest were
either regens with an RF amplifier stage or some variety of superhet.
-H

28278. Re: [regenrx] Re: Do regen-based transceivers radiate RF even when receiving?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-12 01:39:20 UTC
From: mikhail-vulkov@...
Topic: 28269 Message: 28278
Attachments: 1 described; binary payloads are missing from this source WARC

I thinkq the capacitance of C4 is too large.

On 11.6.2017 22:54, Ottavio Caruso ottavio2006-degen@... [regenrx]
wrote:

> Edit: I assume Q2 is the power amplifier that leaks RF?
>
> On Sunday, 11 June 2017, Ottavio Caruso <ottavio2006-degen@...> wrote:
>
>> Bill et al,
>>
>> The circuit is here:
>>
>> http://www.m0zpk.co.uk/wp-content/uploads/2015/05/20150502_141304-1.jpg [1]
>>
>> --
>> Ottavio Caruso
>
> --
> Ottavio Caruso
>

Links:
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[1]
http://www.m0zpk.co.uk/wp-content/uploads/2015/05/20150502_141304-1.jpg
[2]
https://groups.yahoo.com/neo/groups/regenrx/conversations/messages/28274;_ylc=X3oDMTJyNDg0bmpyBF9TAzk3MzU5NzE0BGdycElkAzEzOTk2OTA3BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAMyODI3NARzZWMDZnRyBHNsawNycGx5BHN0aW1lAzE0OTcyMTEzMjY-?act=reply&messageNum=28274
[3]
https://groups.yahoo.com/neo/groups/regenrx/conversations/newtopic;_ylc=X3oDMTJmMzJtaWdtBF9TAzk3MzU5NzE0BGdycElkAzEzOTk2OTA3BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNudHBjBHN0aW1lAzE0OTcyMTEzMjY-
[4]
https://groups.yahoo.com/neo/groups/regenrx/conversations/topics/28269;_ylc=X3oDMTM3cml2am04BF9TAzk3MzU5NzE0BGdycElkAzEzOTk2OTA3BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAMyODI3NARzZWMDZnRyBHNsawN2dHBjBHN0aW1lAzE0OTcyMTEzMjYEdHBjSWQDMjgyNjk-
[5] https://yho.com/1wwmgg
[6]
https://groups.yahoo.com/neo/groups/regenrx/info;_ylc=X3oDMTJmbW1sYWZuBF9TAzk3MzU5NzE0BGdycElkAzEzOTk2OTA3BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDdnRsBHNsawN2Z2hwBHN0aW1lAzE0OTcyMTEzMjY-
[7]

https://groups.yahoo.com/neo/groups/regenrx/members/all;_ylc=X3oDMTJnZ28zN2E5BF9TAzk3MzU5NzE0BGdycElkAzEzOTk2OTA3BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDdnRsBHNsawN2bWJycwRzdGltZQMxNDk3MjExMzI2
[8]
https://groups.yahoo.com/neo;_ylc=X3oDMTJlMGM0bWlvBF9TAzk3NDc2NTkwBGdycElkAzEzOTk2OTA3BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNnZnAEc3RpbWUDMTQ5NzIxMTMyNg--
[9] https://info.yahoo.com/privacy/us/yahoo/groups/details.html
[10] https://info.yahoo.com/legal/us/yahoo/utos/terms/

28279. Re: [regenrx] Re: Do regen-based transceivers radiate RF even when receiving?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-12 08:21:32 UTC
From: Michael
Topic: 28269 Message: 28279

Even the LO of a superhet can leak through to the antenna a wee bit,
depending on the design and physical build. In a regen, the leak is
at such a low level that it only really affects the operator and,
perhaps, a neighbour who happens to be tuning around at the time.
In WW2 when detection of a regen in listening mode was a possible
issue, CW radiation during transmission was far more likely to be
radio-located.

Michael 2E0IHW
.....

On 11.06.17 22:20, Hubert Miller kargo_cult@... [regenrx] wrote:
> I can only think of one 'spy radio' used in Europe that had the antenna
> go right to the regen detector stage – the famous "Paraset", but it was
> only used
>
> in small numbers, and maybe only in Norway; a very small minority of the
> total variety and number of spy radios used in the European war. The
> rest were either regens with an RF amplifier stage or some variety of superhet.

28280. Re: [regenrx] Re: Do regen-based transceivers radiate RF even when receiving?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-12 12:00:56 UTC
From: Jim Wiley
Topic: 28269 Message: 28280

Keep in mind the idea that detecting radiation from a regenerative receiver or the local oscillator of a superhet wouldbe significantly easier if there was a very quiet environment, such as in the middle of anocean. After all, if the receiver is several hundred miles from any othercompeting signals, background noise or QRM would be much less. In time of war, the likelihood of casual signals wouldbe low. Many operators maintained "radio silence" as a normal routine.

- Jim, KL7CC

On 6/12/2017 12:21 AM, Michael michael.setaazul@...
[regenrx] wrote:
>
> Even the LO of a superhet can leak through to the antenna a wee bit,
> depending on the design and physical build. In a regen, the leak is
> at such a low level that it only really affects the operator and,
> perhaps, a neighbour who happens to be tuning around at the time.
> In WW2 when detection of a regen in listening mode was a possible
> issue, CW radiation during transmission was far more likely to be
> radio-located.
>
> Michael 2E0IHW
> .....
>
> On 11.06.17 22:20, Hubert Miller kargo_cult@... [regenrx] wrote:
> > I can only think of one 'spy radio' used in Europe that had the antenna
> > go right to the regen detector stage – the famous "Paraset", but it was
> > only used
> >
> > in small numbers, and maybe only in Norway; a very small minority of
> the
> > total variety and number of spy radios used in the European war. The
> > rest were either regens with an RF amplifier stage or some variety
> of superhet.
>
>

28281. Re: [regenrx] Re: Do regen-based transceivers radiate RF even when receiving?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-12 12:12:19 UTC
From: Bill Cromwell
Topic: 28269 Message: 28281

Hi,

During the war there were horrific losses. Any conceivable risk was mitigated if it could be. When use 20-20 hindsight the fear of being discovered by enemies DFing your regen was not warranted. It certainly seems like a reasonable concern. Nobody has produced any logs, action reports, etc that any enemy was ever detected by DFing their receiver. Their transmitters - certainly. At sea other vessels would be located from their machinery noises, their transmitters, or by line of sight contact well before any oscillating receiver detector would be heard. There are statements from captured former enemy officers that in fact, that never happened. If I was around in 1939 I would have worried about that too.

There is a possibility ashore that oscillating regens or even superhets that radiated minuscule signals could be DFed from a football field length away. Apparently super-regens are worse. The citations I had for that are vague and do not account for the operating conditions. Jamming a VHF repeater 500 feet in the air a mile away? C'mon. That's obvious.

73,

Bill KU8H

On 06/12/2017 04:21 AM, Michael michael.setaazul@...
[regenrx] wrote:
>
> Even the LO of a superhet can leak through to the antenna a wee bit,
> depending on the design and physical build. In a regen, the leak is
> at such a low level that it only really affects the operator and,
> perhaps, a neighbour who happens to be tuning around at the time.
> In WW2 when detection of a regen in listening mode was a possible
> issue, CW radiation during transmission was far more likely to be
> radio-located.
>
> Michael 2E0IHW
> ....
>
> On 11.06.17 22:20, Hubert Miller kargo_cult@... [regenrx] wrote:
> > I can only think of one 'spy radio' used in Europe that had the antenna
> > go right to the regen detector stage – the famous "Paraset", but it was
> > only used
> >
> > in small numbers, and maybe only in Norway; a very small minority of
> the

> > total variety and number of spy radios used in the European war. The
> > rest were either regens with an RF amplifier stage or some variety
> of superhet.
>
>

--
bark less - wag more

28282. Re: [regenrx] Re: Do regen-based transceivers radiate RF even when receiving?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-12 18:18:03 UTC
From: Ottavio Caruso
Topic: 28269 Message: 28282

Jim et al.,

I'm more concerned about RF pollution than about being discovered by the enemy to be honest!

--
Ottavio Caruso

28283. Re: [regenrx] Re: Do regen-based transceivers radiate RF even when receiving?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-12 18:28:19 UTC
From: Michael
Topic: 28269 Message: 28283

On 12.06.17 19:18, Ottavio Caruso ottavio2006-degen@...
[regenrx] wrote:

> I'm more concerned about RF pollution than about being discovered by the
> enemy to be honest!
.....

Looks like "the enemy" truncated your schematic attachment :-)

Times have changed: now we must worry about inimical cyber-location.

Michael 2E0IHW

28284. Re: [regenrx] Re: Do regen-based transceivers radiate RF even when receiving?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-13 01:39:09 UTC
From: Bill Cromwell
Topic: 28269 Message: 28284

Hi Ottavio,

Those guys all those years ago were concerned about *exactly* the same thing as you - rf pollution. But the stakes for them were very much higher than they are for you and I. We are not going to die for making a mess. Aren't we lucky! The whole point of that is there isn't much radiation and even that can be stifled. How to do that was included in the messages. Do you have more questions? Do you have missing citations?

73,

Bill KU8H

On 06/12/2017 02:18 PM, Ottavio Caruso ottavio2006-degen@... [regenrx] wrote:
>
> Jim et al.,
>
>
> I'm more concerned about RF pollution than about being discovered by
> the enemy to be honest!
>
>
> --
> Ottavio Caruso
>

--
bark less - wag more

28285. Re: [regenrx] Re: Do regen-based transceivers radiate RF even when receiving?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-13 03:05:44 UTC
From: J Ed
Topic: 28269 Message: 28285

A common base (or grounded grid) stage ahead of the detector won't give you much forward gain, but it will help out in the realm of antenna isolation. They have maybe 10db of forward gain but much higher loss in reverse. A 1 watt signal would become a 1 microwatt signal.

The last regen I built used two dual triodes with 24v on the plates. The RF amplifier was grounded grid and used three chokes in series, two 1mh and a 100uh choke, all green epoxy. The idea was to make the series load have a high reactance even as the frequency rose. Still, reception wasn't great above 4 MHz.

With a better scope and test equipment, I'd like to repeat the experience with 90v on the plates. I'd be able to calibrate the front end and see exactly where the deficiencies lie.

Ed AE7TE

On Jun 13, 2017 05:05, "Bill Cromwell wrcromwell@... [regenrx]" < regenrx@yahoogroups.com> wrote:

>
>
> Hi Ottavio,
>
> Those guys all those years ago were concerned about *exactly* the same
> thing as you - rf pollution. But the stakes for them were very much
> higher than they are for you and I. We are not going to die for making a
> mess. Aren't we lucky! The whole point of that is there isn't much
> radiation and even that can be stifled. How to do that was included in
> the messages. Do you have more questions? Do you have missing citations?
>
> 73,
>
> Bill KU8H
>
> On 06/12/2017 02:18 PM, Ottavio Caruso ottavio2006-degen@yahoo.com
> [regenrx] wrote:
> >
> > Jim et al.,
> >
> >
> > I'm more concerned about RF pollution than about being discovered by
> > the enemy to be honest!
> >
> >

> > --
> > Ottavio Caruso
> >
>
> --
> bark less - wag more
>
>
>

28286. Re: [regenrx] Re: Do regen-based transceivers radiate RF even when receiving?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-13 15:10:54 UTC
From: Bill Cromwell
Topic: 28269 Message: 28286

Hi Ed,

Depending on tube types and even individual tubes you can start getting good results with about 45 volts B+. I have tried reduced B+ on several tube radios and I switched to 90 volts on my six tube superhets. Heresy, I know - apologies. Those radios had noticeable reduction in performance at 45 volts but I did not make any accommodations in screen and grid bias circuits (more important in the screens) for the reduced B+. I feed mine from 9-volt batteries in series stacks. They run the radios for a satisfying long time. They should perform at least as well in a three or four tube regen. There are "battery" tubes that are intended to run very well on plate voltages as low as 22 volts (and will probably thrive on less). The filaments (not indirectly heated cathodes) also draw very low current for practical battery operation. The place where you will find trouble is in the audio output. If you want loudspeakers that rattle your windows be prepared to buy a lot more batteries! I use Hi-Z cans. I could also get away with using a set of speakers with solid state amplifiers in them as sold for computers and such. Is that cheating? I admit I have done that before. But I also have fed the output from a tube regen into a computer soundcard and then applied digital processing. Oy!? (quoting Tim "The Toolman" Allen)

73,

Bill KU8H

On 06/12/2017 11:05 PM, J Ed jedwardsat1@... [regenrx] wrote:
> A common base (or grounded grid) stage ahead of the detector won't
> give you much forward gain, but it will help out in the realm of
> antenna isolation. They have maybe 10db of forward gain but much
> higher loss in reverse. A 1 watt signal would become a 1 microwatt
> signal.
>
> The last regen I built used two dual triodes with 24v on the plates.
> The RF amplifier was grounded grid and used three chokes in series,
> two 1mh and a 100uh choke, all green epoxy. The idea was to make the
> series load have a high reactance even as the frequency rose. Still,
> reception wasn't great above 4 MHz.
>
> With a better scope and test equipment, I'd like to repeat the
> experience with 90v on the plates. I'd be able to calibrate the front
> end and see exactly where the deficiencies lie.
>
> Ed AE7TE
>

--
bark less - wag more

28287. MORGAN BOOKS Is a .0025MFD condenser a 2.5nanoFarad capacitor

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-13 16:32:21 UTC
From: Rob
Topic: 28287 Message: 28287

The MORGAN BOYS FIRST BOOK OF RADIO AND ELECTRONICS
shows this plan:
http://www.learnmorsecode.com/regen7/100pf.jpg

That labels 0.0025MFD and 0.0001MFD and 365MMFD on capacitors.

Am I wrong to replace .0025MFD with 2.5nanoFarad mylar

and .0001MFD with 1,000 picofarad ceramic

and 365MMFD with 365 picoFarad polyvaricon

??????????

28288. Re: Do regen-based transceivers radiate RF even when receiving?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-13 17:41:43 UTC
From: b_weeber@...
Topic: 28269 Message: 28288

Since ~10 years i have built and tested many different regenerative circuits. Most of them have been teared apart, to start the next project. I found, that the radiation can be very different. Some circuits, like the Armstrong are able to radiate a lot, if the regeneration is turned up too far. Sometimes i measured 1-2 Volts on the antenna connector. All tube regens, where the plate is driving the feedback coil, should be able, to do the same. One of my recent receivers is a hartley/eco circuit. It is hard, to see anything on the oscilloscope, so i only can guess the max. voltage is below 10mV.

Bernd

28289. Re: [regenrx] MORGAN BOOKS Is a .0025MFD condenser a 2.5nanoFarad capacitor

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-13 18:07:34 UTC
From: msalbert@...
Topic: 28287 Message: 28289

I believe you are correct in all cases! Regards, Mark -----Original Message----- From: Rob roomberg@... [regenrx] To: regenrx Sent: Tue, Jun 13, 2017 11:32 AM Subject: [regenrx] MORGAN BOOKS Is a .0025MFD condenser a 2.5nanoFarad capacitor

The MORGAN BOYS FIRST BOOK OF RADIO AND ELECTRONICS shows this plan: http://www.learnmorsecode.com/regen7/100pf.jpg That labels 0.0025MFD and 0.0001MFD and 365MMFD on capacitors. Am I wrong to replace .0025MFD with 2.5nanoFarad mylar and .0001MFD with 1,000 picofarad ceramic and 365MMFD with 365 picoFarad polyvaricon ???????????

28295. Tube Substituion

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-14 06:49:08 UTC
From: jjdobrikin@...
Topic: 28295 Message: 28295

Hi
Looking for info /advice on using modern tubes with Lower Plate B+ voltages to be able to use a modern wallwart power supply.
To repolace O1A and UX 226 in TRF and Regenerative Radios.
Atwater Kent Model 20 C, Radiola III, Radiola IIIA, Westinghouse RADA.
Thanx
73 de Jordan ve7jjd

28296. Re: Tube Substituion

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-14 22:15:38 UTC
From: b_weeber@...
Topic: 28295 Message: 28296

Hello Jordan,

you could try a 1L4 or the Russian 2SH27L (2Ж27Л) and connect them as a triode. Both can manage a cathode current of ~6mA. The 1L4 is a apprupt cut off type and should work well as a detector. Also the 2SH27L has already been used successfully in regenerative receivers. The should work well from ~30 Volts and above. Both are easily available and not expensive. Then calculate and connect a series resistor in order, to run the tube from the same filament voltage.

Most of the pencil tubes have a max. cathode current of ~1...3mA, but sometimes this is enough. Like the 5678, the 1AD4 or 1SH17B (1Ж17Б).
http://www.elektronikinfo.de/techpic/strom/1j17b.gif
http://www.elektronikinfo.de/techpic/strom/1j17b.gif
They can easily be hidden in the bottom / socket of an old, defective tube. Afterwards you should label it with "UX 226R" for example, to mark it is a replacement.

There is another russian tube, which could be useful, the 1P24B (1П24Б). As a transmitter, this little tube has a power output up to >2 watts. Never tried, if it works as a detector, but it should be a apprupt cut off.
http://www.radiovilag.hu/images/1P24B.pdf http://www.radiovilag.hu/images/1P24B.pdf

Best regards,
Bernd

28297. Re: [regenrx] Re: Tube Substituion

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-14 22:33:15 UTC
From: Jordan Dobrikin
Topic: 28295 Message: 28297

Hi
Thanx to all for your timely responses.
As part of a STEAMPUNK Radio project using Antique/Vintage components and building from scratch we are exploring the retrofit of some complete Radios. To remove the Cabinetry and show the components. The need for lower voltage powering is one of safety as well as economics.
TRF Radios like Atwater Kent Model 20C
Regenerative Radios like the Radiola III & IIIA as well as Westinghouse RADA

Thanx
73 de Jordan ve7jjd

On Wed, Jun 14, 2017 at 3:15 PM, b_weeber@... [regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> Hello Jordan,
>
> you could try a 1L4 or the Russian 2SH27L (2Ж27Л) and connect them as a
> triode. Both can manage a cathode current of ~6mA. The 1L4 is a apprupt
> cut off type and should work well as a detector. Also the 2SH27L has
> already been used successfully in regenerative receivers. The should work
> well from ~30 Volts and above. Both are easily available and not expensive.
> Then calculate and connect a series resistor in order, to run the tube
> from the same filament voltage.
>
> Most of the pencil tubes have a max. cathode current of ~1...3mA, but
> sometimes this is enough. Like the 5678, the 1AD4 or 1SH17B (1Ж17Б).
> http://www.elektronikinfo.de/techpic/strom/1j17b.gif
> They can easily be hidden in the bottom / socket of an old, defective
> tube. Afterwards you should label it with "UX 226R" for example, to mark
> it is a replacement.
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> There is another russian tube, which could be useful, the 1P24B (1П24Б
>). As a transmitter, this little tube has a power output up to >2 watts.
> Never tried, if it works as a detector, but it should be a apprupt cut
> off.
> http://www.radiovilag.hu/images/1P24B.pdf
>
> Best regards,
> Bernd
>
>

28298. Cheap Crystals

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-15 19:42:32 UTC
From: regenbuilder@...
Topic: 28298 Message: 28298

A little off topic, but Mouser now sells HC-49 crystals for a few 40M CW frequencies at very reasonable prices. No minimum order, and if you ask to have them shipped First Class Mail the shipping cost will only be $2-$3.

http://www.mouser.com/ProductDetail/IQD-Frequency-Products/LFXTAL011525Bulk/?qs=%2fha2pyFaduj5psyyFXWBlEvO1cjvEURRAQjHvgL19ko%3d http://www.mouser.com/ProductDetail/IQD-Frequency-Products/LFXTAL011525Bulk/?qs=%2fha2pyFaduj5psyyFXWBlEvO1cjvEURRAQjHvgL19ko%3d

http://www.mouser.com/ProductDetail/IQD/LFXTAL016096Bulk/?qs=sGAEpiMZZMsBj6bBr9Q9aR%2fuGiDjvlISZZMp6AZ5cK%252bavUI70cqzJA%3d%3d http://www.mouser.com/ProductDetail/IQD/LFXTAL016096Bulk/?qs=sGAEpiMZZMsBj6bBr9Q9aR%2fuGiDjvlISZZMp6AZ5cK%252bavUI70cqzJA%3d%3d

http://www.mouser.com/ProductDetail/IQD/LFXTAL011468Bulk/?qs=sGAEpiMZZMsBj6bBr9Q9af1kE%252bXo19x3GnD60rI8FM7pfrSvmxAxPg%3d%3d http://www.mouser.com/ProductDetail/IQD/LFXTAL011468Bulk/?qs=sGAEpiMZZMsBj6bBr9Q9af1kE%252bXo19x3GnD60rI8FM7pfrSvmxAxPg%3d%3d

http://www.mouser.com/ProductDetail/IQD-Frequency-Products/LFXTAL015699Bulk/?qs=e4%2fAndAAwgJJa1kDX%2ftQ8g%3d%3d http://www.mouser.com/ProductDetail/IQD-Frequency-Products/LFXTAL015699Bulk/?qs=e4%2fAndAAwgJJa1kDX%2ftQ8g%3d%3d

Mike

28299. Re: [regenrx] MORGAN BOOKS Is a .0025MFD condenser a 2.5nanoFarad capacitor

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-16 01:26:11 UTC
From: msalbert@...
Topic: 28287 Message: 28299

Apologies in advance . . . I recall seeing something about improvements or corrections to Morgan's schematic, but dang I can't find it now. Maybe someone better with Google can, or maybe the site was taken down.
What I recall is the writer saying that when wired as drawn the regeneration was touchy . . . a sudden transition from non-oscillating to oscillating. I *think* his fix involved a smaller value pot, maybe 5k, and adding a jumper to make the pot a rheostat.

I thought I'd printed this out and tucked it into my copy of "The First" but no dice. Sorry for being vague and not having a reference to link . . . I could be way off with my recollections, but if nothing else it's an avenue for experimentation once you get it going. Good Luck!

Regards,
Mark KB9VKE

-----Original Message-----
From: Rob roomberg@... [regenrx] <regenrx@yahoogroups.com>
To: regenrx <regenrx@yahoogroups.com>
Sent: Tue, Jun 13, 2017 11:32 am
Subject: [regenrx] MORGAN BOOKS Is a .0025MFD condenser a 2.5nanoFarad capacitor

The MORGAN BOYS FIRST BOOK OF RADIO AND ELECTRONICS
shows this plan:
http://www.learnmorsecode.com/regen7/100pf.jpg

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Am I wrong to replace .0025MFD with 2.5nanoFarad mylar

and .0001MFD with 1,000 picofarad ceramic

and 365MMFD with 365 picoFarad polyvaricon

??????????

28300. Re: [regenrx] MORGAN BOOKS Is a .0025MFD condenser a 2.5nanoFarad capacitor

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-16 01:46:11 UTC
From: msalbert@...
Topic: 28287 Message: 28300

Well, if I'd just looked a little bit longer. Here is the link to a youtube video discussing improvements I recalled.

https://www.youtube.com/watch?v=PDPZQcU_jms

Regards,
Mark KB9VKE

-----Original Message-----
From: Rob roomberg@... [regenrx] <regenrx@yahoogroups.com>
To: regenrx <regenrx@yahoogroups.com>
Sent: Tue, Jun 13, 2017 11:32 am
Subject: [regenrx] MORGAN BOOKS Is a .0025MFD condenser a 2.5nanoFarad capacitor

The MORGAN BOYS FIRST BOOK OF RADIO AND ELECTRONICS
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Am I wrong to replace .0025MFD with 2.5nanoFarad mylar

and .0001MFD with 1,000 picofarad ceramic

and 365MMFD with 365 picoFarad polyvaricon

???????????

28301. Re: Cheap Crystals

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-16 10:34:44 UTC
From: buzzgiles@...
Topic: 28298 Message: 28301

Tnx Mike,

30 meters as well ;

http://www.mouser.com/Passive-Components/Frequency-Control-Timing-Devices/_/N-6zu9e?P=1y9owgs&Keyword=crystal&FS=True http://www.mouser.com/Passive-Components/Frequency-Control-Timing-Devices/_/N-6zu9e?P=1y9owgs&Keyword=crystal&FS=True

73 de Gary,KF9CM

28302. Is TheRadioBoard forum closed?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-16 13:43:00 UTC
From: astongoldsmith@...
Topic: 28302 Message: 28302

I just look into:
http://theradioboard.com/rb/ http://theradioboard.com/rb/
and it looks to me that hosting is closed ?
my forum is still open to any radio enthusiast on:
http://euradioboard.createmybb3.com/ http://euradioboard.createmybb3.com/

28303. Re: Cheap Crystals

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-16 15:08:18 UTC
From: regenbuilder@...
Topic: 28298 Message: 28303

You're right Gary. Also 20M, 17M, and 15M too!

28304. Re: Is TheRadioBoard forum closed?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-16 20:17:39 UTC
From: dawmast@...
Topic: 28302 Message: 28304

Or is the server on which The RadioBoard is hosted, suffering from a big failure?

28305. Re: Is TheRadioBoard forum closed?

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-16 20:22:22 UTC
From: dawmast@...
Topic: 28302 Message: 28305

At http://www.theradioboard.com/rb/viewtopic.php?f=6&p=74367&sid=6bdb388e1e30e1b75467b0a435885483#p74367 http://www.theradioboard.com/rb/viewtopic.php?f=6&p=74367&sid=6bdb388e1e30e1b75467b0a435885483#p74367 a message about the site outage. It was caused by an overload to the server.

28306. Self-resonant frequency of chokes - measuring

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-19 09:25:08 UTC
From: les.au49@...
Topic: 28306 Message: 28306

I have a 1mH "formed" choke.

Actually I have a packet of these ... but for the purpose of this posting I'll consider a single choke.
My choke is modern. It's not one of those nice "pi-wound" chokes that James Millen invented.
My choke could easily be mistaken for a 1/2 watt resistor.

How do I measure the self-resonant frequency?
All methods of measurement welcome.

Les

28307. Re: Self-resonant frequency of chokes - measuring

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-19 10:19:05 UTC
From: les.au49@...
Topic: 28306 Message: 28307

Here is my method: I connect a 4700 resistor across the choke. (In parallel with the choke.)

I wind a 5 turn link around the body of the choke.
I feed the link with a 300mV signal from an RF generator.

I connect a SECOND link around the body of the choke and connect my CRO to the second link.

Starting at a low frequency I sweep UP in frequency.
Around 7MHz I see a few mV appear on the CRO. At first the signal is distorted, but increasing the frequency to 11MHz I see the signal appear as a sine-wave. There is a broad peak in the observed signal strength between 11 and 12 MHz.

But I don't believe the SRF of my choke is that high.
What do other list-readers think?

Les.

28308. Re: [regenrx] Re: Self-resonant frequency of chokes - measuring

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-19 10:34:09 UTC
From: J Ed
Topic: 28306 Message: 28308

If you're talking about the green epoxy coated chokes, I think the mfr lists their SRF as somewhere around 790 KHz. I've often thought of making 455 KHZ IF filters using them.

One way to measure inductor resonant frequency is to make two small capacitors. For MF, you could make them 10pF. Use some sheet metal bent at a 90 degree angle to make one plate. Two plates, bolted to an insulating base facing each other, form a capacitor.

Place the two caps in series, insulated from a ground plane. One plate connects to a signal generator, another to a scope, and the junction in the middle to the choke you are measuring. Sweep across frequencies until you find a peak. The small capacitances isolate the choke from the wiring in the signal generator and scope probe.

Ed AE7TE

On Jun 19, 2017 13:19, "les.au49@... [regenrx]" <
regenrx@yahoogroups.com> wrote:

Here is my method: I connect a 4700 resistor across the choke. (In parallel with the choke.)

I wind a 5 turn link around the body of the choke.
I feed the link with a 300mV signal from an RF generator.

I connect a SECOND link around the body of the choke and connect my CRO to the second link.

Starting at a low frequency I sweep UP in frequency.
Around 7MHz I see a few mV appear on the CRO. At first the signal is distorted, but increasing the frequency to 11MHz I see the signal appear as a sine-wave. There is a broad peak in the observed signal strength between 11 and 12 MHz.

But I don't believe the SRF of my choke is that high.
What do other list-readers think?

Les.

28309. Re: [regenrx] Re: Self-resonant frequency of chokes - measuring

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-19 10:44:01 UTC
From: les.au49@...
Topic: 28306 Message: 28309

Hello Ed:

My chokes are green, and they appear to be covered with epoxy - as far as I can judge.

This means my suspicion of my observation is reasonable, because I'm out by a factor of about x10.
(700kHz vs 7Mhz.)

Reading your description it seems I should make a "T" - with the two caps in series across the "T".
If I understand you correctly the choke forms the vertical bar on the "T" - yes??

I have handfuls of 2/4.7/10pF caps. Do I still need to form caps from angle metal?

Thanks for your info!

Les

28310. Re: [regenrx] Re: Self-resonant frequency of chokes - measuring

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-19 11:20:23 UTC
From: J Ed
Topic: 28306 Message: 28310

Yes, form a tee. There are other ways to do what I suggest but this is one that makes the most sense to me.

If you have small value capacitors, no need to fabricate your own. The key is very light coupling to the resonant circuit. It will develop voltage as it reaches resonance.

Ed AE7TE

On Jun 19, 2017 13:44, "les.au49@... [regenrx]" <regenrx@yahoogroups.com> wrote:

>
>
> Hello Ed:
>
> My chokes are green, and they appear to be covered with epoxy - as far as
> I can judge.
>
> This means my suspicion of my observation is reasonable, because I'm out
> by a factor of about x10.
> (700kHz vs 7Mhz.)
>
> Reading your description it seems I should make a "T" - with the two caps
> in series across the "T".
> If I understand you correctly the choke forms the vertical bar on the "T"
> - yes??
>
> I have handfuls of 2/4.7/10pF caps. Do I still need to form caps from
> angle metal?
>
> Thanks for your info!
>
> Les
>
>

28311. Re: [regenrx] Re: Self-resonant frequency of chokes - measuring

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-19 18:56:32 UTC
From: les.au49@...
Topic: 28306 Message: 28311

Hi Ed,
Ha! I have a handful of 1pF capacitors in my parts drawer.
I'll use that value.
I always wondered what I might do with such a low value.
Now I know. It's 4:45 AM so I won't do anything at the moment, but tomorrow evening ....

I have several values of RF choke - 1mH, 1.5mH and so on. Some lower (eg 47uH)
The "standard" circuit for a regen set gives the value of the plate tickler choke as 2.5mH, but I suspect that value came from the days when regen sets tuned below the AM BC band. I suspect (without trying) that a 1mH choke will work well in the tickler circuit. (or even less if the set doesn't tune the BC band.)

Here, in Australia, the national public broadcaster is pushing digital radio. Maybe the AM BC band will "go" in 20 or 50 years?

Les

28312. Re: [regenrx] Re: Self-resonant frequency of chokes - measuring

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-19 19:09:32 UTC
From: J Ed
Topic: 28306 Message: 28312

The tickler coil is a link that couples the plate back to the grid circuit. It's usually a handful of turns on the same coil form as the tuning coil.

I think what you are referring to is the plate choke, which connects B+ to the tube for it to operate. Those are normally a high value to confine all RF current to the plate.

Those normally have a low resonant frequency but can still perform at frequencies somewhat higher, because the small self capacitance is still a high impedance at frequencies above resonance.

The standard bank wound come you see in many projects supposedly has an SRF of about 1700 KHz but people are still using them to the upper end of HF.

Ed AE7TE

On Jun 19, 2017 21:56, "les.au49@... [regenrx]" <
regenrx@yahoogroups.com> wrote:

Hi Ed,
Ha! I have a handful of 1pF capacitors in my parts drawer.
I'll use that value.
I always wondered what I might do with such a low value.
Now I know. It's 4:45 AM so I won't do anything at the moment, but tomorrow evening ....

I have several values of RF choke - 1mH, 1.5mH and so on. Some lower (eg 47uH)
The "standard" circuit for a regen set gives the value of the plate tickler choke as 2.5mH, but I suspect that value came from the days when regen sets tuned below the AM BC band. I suspect (without trying) that a 1mH choke will work well in the tickler circuit. (or even less if the set doesn't tune the BC band.)

Here, in Australia, the national public broadcaster is pushing digital radio. Maybe the AM BC band will "go" in 20 or 50 years?

Les

28313. Re: [regenrx] Re: Self-resonant frequency of chokes - measuring

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-20 04:59:27 UTC
From: les.au49@...
Topic: 28306 Message: 28313

Hello Ed,

Thank you for correcting my poor terminology "plate tickler coil". I obviously mean the RF choke in the plate circuit.

MEASURING THE SELF RESONANT FREQ.
I used the method you describe. Here are my observations:

Choke value Self Resonant Freq.
mH (a) (b)
1000uH 0.77MHz not recorded
1500uH 1.09MHz 1.26MHz

I used two methods of measurement. (a) as you described.
(b) An adaption of your method. I moved the CRO from the capacitor to a 4 turn link wound around the body of the choke. The resonance peak is easily seen, and at 1.26 measured 36mV (about 1/10 of the input signal).

The "Q" of the choke is about 3.5

28314. Re: [regenrx] Re: Self-resonant frequency of chokes - measuring

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-20 11:35:46 UTC
From: J Ed
Topic: 28306 Message: 28314

Interesting adaptation. I'm surprised that a higher value choke has a higher resonant frequency.

As I said, I want to try the epoxy chokes as tuned filter transformers. If I can't get them to work well enough, I could try the larger toroids which have the same inductance with heavier wire. I'd have to couple the circuits with a small capacitance to make the filter effective.

I tried winding my own if transformers once. I don't know how well it worked because the entire radio wasn't doing so hot. I feel like, had I started simpler, I would have gotten better results.

Ed AE7TE

On Jun 20, 2017 07:59, "les.au49@... [regenrx]" <
regenrx@yahoogroups.com> wrote:

>
>
> Hello Ed,
>
> Thank you for correcting my poor terminology "plate tickler coil". I
> obviously mean the RF choke in the plate circuit.
>
> MEASURING THE SELF RESONANT FREQ.
> I used the method you describe. Here are my observations:
>
> Choke value Self Resonant Freq.
> mH (a) (b)
> 1000uH 0.77MHz not recorded
> 1500uH 1.09MHz 1.26MHz
>
> I used two methods of measurement. (a) as you described.
> (b) An adaption of your method. I moved the CRO from the capacitor to a
> 4 turn link wound around the body of the choke. The resonance peak is
> easily seen, and at 1.26 measured 36mV (about 1/10 of the input signal).
>
> The "Q" of the choke is about 3.5
>
>
>
>

28315. Re: [regenrx] Re: Self-resonant frequency of chokes - measuring

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-20 20:11:37 UTC
From: Jim Scott
Topic: 28306 Message: 28315

Assuming the equipment isn't lying, I would suspect that capacitance within the choke is causing the higher frequency of resonance, or the markings are wrong.

73,

Jim Scott
WB0IYC
Life Member ARRL
FISTS 15327
Joplin, MO EM27RC
http://www.wb0iyc.com

The whole universe is waiting...
http://www.jpl.nasa.gov/

-----Original Message-----
From: J Ed jedwardsat1@... [regenrx] [mailto:regenrx@yahoogroups.com]
Sent: Tuesday, June 20, 2017 06:35 AM
To: regenrx@yahoogroups.com
Subject: Re: [regenrx] Re: Self-resonant frequency of chokes - measuring

Interesting adaptation. I'm surprised that a higher value choke has a higher resonant frequency.

As I said, I want to try the epoxy chokes as tuned filter transformers. If I can't get them to work well enough, I could try the larger toroids which have the same inductance with heavier wire. I'd have to couple the circuits with a small capacitance to make the filter effective.

I tried winding my own if transformers once. I don't know how well it worked because the entire radio wasn't doing so hot. I feel like, had I started simpler, I would have gotten better results.

Ed AE7TE

On Jun 20, 2017 07:59, "les.au49@... [regenrx]" <regenrx@yahoogroups.com> wrote:
Hello Ed,

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I used the method you describe. Here are my observations:

Choke value Self Resonant Freq.
mH (a) (b)
1000uH 0.77MHz not recorded
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I used two methods of measurement. (a) as you described.
(b) An adaption of your method. I moved the CRO from the capacitor to a 4 turn link wound around the body of the choke. The resonance peak is easily seen, and at 1.26 measured 36mV (about 1/10 of the input signal).

The "Q" of the choke is about 3.5

28316. OT: You know it's hot when. . .

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-20 21:20:32 UTC
From: Phil
Topic: 28316 Message: 28316

Every year TARC (Turlock Amateur Radio Club) has been VERY active on field day, planning it months in advance, having an Ice Cream Social at the last club meeting before FD (usually about two weeks) to set up who will work which bands/modes, equipment, food and so forth. That Ice Cream Social was held last Tuesday and all went well. They usually hold FD on some private property where there is an Almond Orchard, banks of a river etc.

Well, today for safety reasons the TARC Officials decided to completely cancel FD this year and have put the notices out, announcing it on the repeater during the W6BXN/R repeater ID's, etc. . . It's ALWAYS hot here in the central valley at the end of June, but they were afraid that this heat wave that in in the middle of this year might cause some very severe medical problems, especially for the older members. I don't think it's EVER been cancelled before. This week the temps have been near record levels, right now (2:00PM) my outdoor remote thermometer says it's 108F outside, the "Weather Underground" web site says it's 108.7F here in town.

This really doesn't affect my FD plans, I'd already planned on running it from home in "Class 1E" (from home on emergency power). I've done that for years, can't handle the heat of operating in a tent outside, etc.

--
73 From "The Beaconeer's Lair"
Specializing in DXing NDBs (Longwave Beacons)
Phil, KO6BB, http://www.qsl.net/ko6bb/
KO6BB/B beacon, ~20W on 28.290 MHz, Ringo Vertical

HF/LF RADIOS:
HOMEBREW: 7 Tube+Rect 1v3 Regen RX for LF (built 2015)
Icom: IC-7200 Xceiver, DSP IF & filters (~2015).
Kenwood: TS-450SAT Xceiver, cascaded 250/125Hz Inrad filters.
10M Beacon: Realistic HTX-100 on 28.290MHz
SDR: Softrock Ensemble II LF (built from a kit 2017).

ACC: HOMEBREW LF-MF Pre-Amp, 8Hz Audio Filter.
HOMEBREW 4 Port Antenna Multicoupler, Feeds 4 RX's.

ANTENNAS: 88 foot Long Ladder-line fed dipole, 35 feet AGL for MW/SW.
Active Mini-Whip, 36 Feet AGL for LF/MW/SW.
37 foot "Low Noise Vertical", 11 feet AGL for LF/MW/SW.
Cushcraft AR-10 Ringo Vertical, 14 feet AGL for 10M beacon.
Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

This email has been checked for viruses by AVG.

http://www.avg.com

28317. Re: Self-resonant frequency of chokes - measuring

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-20 21:58:17 UTC
From: les.au49@...
Topic: 28306 Message: 28317

Hello Jim,

Rule #1. Trust you're instruments. Mostly they aren't lying.
Rule #2. Don't trust yourself. If you're like me you tell lies, and specifically in this case that's what I did.
The two values in the first column are reversed. I often make mistakes like that.

Les.

I measured the values in reverse order, (columns 2 & 3) Greatest inductance first.
Then I wrote my posting (and lost it).
When I re-typed the posting I wrote the value of the chokes in ascending order, but I didn't change the order of observations in the table of results. Lab-books show many errors like this (if you know where to look). I can assure you, more inductance gives a lower frequency for self resonance.

If anyone has a table showing ALL the self-resonant frequencies for these chokes, PLEASE TELL ME WHERE I CAN GET A COPY.

28318. Re: [regenrx] OT: You know it's hot when. . .

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-20 22:41:25 UTC
From: Michael
Topic: 28316 Message: 28318

Wow, Phil!

Here, overlooking the Atlantic it was a cool 34°C today.
But still dodgy for the wonky-hearted, so I guess the
field day deferral was warranted! I like the idea of
an Ice Cream Social. (Maybe we'll return to °F post-Brexit :-)

I am scheduled for an extra bit of stainless steel this
week, so I hope my slot does not get sequestered by
a more urgent heat-triggered case!

Keep cool and enjoy your exclusive FD!

Michael 2E0IHW

On 20.06.17 22:20, Phil ko6bb1@... [regenrx] wrote:
...
> Well, today for safety reasons the TARC Officials decided to completely
> cancel FD this year and have put the notices out, announcing it on the
> repeater during the W6BXN/R repeater ID's, etc. . . It's ALWAYS hot
> here in the central valley at the end of June, but they were afraid that
> this heat wave that in in the middle of this year might cause some very
> severe medical problems, especially for the older members. I don't
> think it's EVER been cancelled before. This week the temps have been
> near record levels, right now (2:00PM) my outdoor remote thermometer
> says it's 108F outside, the "Weather Underground" web site says it's
> 108.7F here in town.
>
> This really doesn't affect my FD plans, I'd already planned on running
> it from home in "Class 1E" (from home on emergency power). I've done
> that for years, can't handle the heat of operating in a tent outside, etc.
...
> Phil, KO6BB,

28319. Coils & coil winding

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-22 15:52:03 UTC
From: Hubert Miller
Topic: 28319 Message: 28319

I was looking up info on "coil winders" and I saw this article. It has, I think, an interesting wealth of information on coil winding,
with some comments on Q. Recommended, if you're interested in such subjects.
https://www.nonstopsystems.com/radio/pdf-ant/article-k5bcq-coil.pdf

-Hue

28320. Short Wave Craft article

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-29 22:54:54 UTC
From: Louis Vermond
Topic: 28320 Message: 28320
Attachments: 2 described; binary payloads are missing from this source WARC

Hello,

Does anyone here know the month and year this RX project appeared in Short Wave Craft magazine?

TKS, Lou
VE3AWA

28321. RE: [regenrx] Short Wave Craft article [2 Attachments]

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-30 00:01:48 UTC
From: Hubert Miller
Topic: 28320 Message: 28321

The article seems to be pretty well hidden, altho I'm sure it was discussed here in the past. I didn't see it in the group files, nor did any combination I tried to Google have success.
If no one comes up with it, you might have to go to americanradiohistory.com, select Short Wave Craft, and maybe start with 1934 and just start looking at copies.
Then if not 1934, move one year up and down. Good luck! (I decided I could not keep all the hundreds of lbs. of magazines I had, and disposed of them. I sent many to that radio history site.)
-Hue

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Thursday, June 29, 2017 3:55 PM
To: regenrx@yahoogroups.com
Subject: [regenrx] Short Wave Craft article [2 Attachments]

Hello,

Does anyone here know the month and year this RX project appeared in Short Wave Craft magazine?

TKS, Lou
VE3AWA

28322. Re: [regenrx] Short Wave Craft article

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-30 12:24:42 UTC
From: Baruch Atta
Topic: 28320 Message: 28322

It looks like my kind of project!

On Thu, Jun 29, 2017 at 8:01 PM, Hubert Miller kargo_cult@... [regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> The article seems to be pretty well hidden, altho I'm sure it was
> discussed here in the past. I didn't see it in the group files, nor did any
> combination I tried to Google
> have success.
> If no one comes up with it, you might have to go to
> americanradiohistory.com, select Short Wave Craft, and maybe start with
> 1934 and just start looking at copies.
> Then if not 1934, move one year up and down. Good luck! (I decided I
> could not keep all the hundreds of lbs. of magazines I had, and disposed of
> them. I sent many
> to that radio history site.)
> -Hue
>

28323. Re: [regenrx] Short Wave Craft article [2 Attachments]

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-30 12:34:21 UTC
From: Baruch Atta
Topic: 28320 Message: 28323

http://www.radioboatanchor.com/blog/building-a-doerle-two-tube-shortwave-receiver

http://www.antiqueradios.com/archives/Doerle4SW.pdf

On Thu, Jun 29, 2017 at 6:54 PM, 'Louis Vermond' ldvermond@...
[regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> Hello,
>
> Does anyone here know the month and year this RX project appeared in Short
> Wave Craft magazine?
>
> TKS, Lou
> VE3AWA
>
>
>

28324. Re: [regenrx] Short Wave Craft article

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-30 13:18:00 UTC
From: Rob
Topic: 28320 Message: 28324

THANK YOU for that PDF... chock full of old school stuff.

On 06/30/2017 08:34 AM, Baruch Atta baruchatta@... [regenrx] wrote:
> http://www.radioboatanchor.com/blog/building-a-doerle-two-tube-shortwave-receiver
>
> http://www.antiqueradios.com/archives/Doerle4SW.pdf
>
> On Thu, Jun 29, 2017 at 6:54 PM, 'Louis Vermond'
> ldvermond@... <mailto:ldvermond@...> [regenrx]
> <regenrx@yahoogroups.com <mailto:regenrx@yahoogroups.com>> wrote:
>
> Hello,
> Does anyone here know the month and year this RX project appeared
> in Short Wave Craft magazine?
> TKS, Lou
> VE3AWA
>
>

28325. Re: [regenrx] Short Wave Craft article

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-30 13:46:44 UTC
From: Brian Ford
Topic: 28320 Message: 28325

blockquote, div.yahoo_quoted { margin-left: 0 !important; border-left:1px #715FFA solid !important; padding-left:1ex !important; background-color:white !important; } Great PDF and blog article! Thanks for sharing!
Keith

Sent from Yahoo Mail for iPad

On Friday, June 30, 2017, 07:34, Baruch Atta baruchatta@... [regenrx] <regenrx@yahoogroups.com> wrote:

http://www.radioboatanchor.com/blog/building-a-doerle-two-tube-shortwave-receiver

http://www.antiqueradios.com/archives/Doerle4SW.pdf

On Thu, Jun 29, 2017 at 6:54 PM, 'Louis Vermond' ldvermond@sympatico.ca [regenrx] <regenrx@yahoogroups.com> wrote:

Hello, Does anyone here know the month and year this RX project appeared in Short Wave Craft magazine? TKS, LouVE3AWA

28326. Re: [regenrx] Short Wave Craft article

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-30 17:33:36 UTC
From: Baruch Atta
Topic: 28320 Message: 28326

If you liked that one, here is Another good one.

(this one is a little better resolution - clearer text and photos)
http://www.rsp-italy.it/Electronics/Books/_contents/radio/How%20to%20Make%20the%20Most%20Popular%20all%20Wave%20Receivers%20-%20Gernsback%201935.pdf

On Fri, Jun 30, 2017 at 8:34 AM, Baruch Atta baruchatta@... [regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> http://www.radioboatanchor.com/blog/building-a-doerle-
> two-tube-shortwave-receiver
>
> http://www.antiqueradios.com/archives/Doerle4SW.pdf
>
> On Thu, Jun 29, 2017 at 6:54 PM, 'Louis Vermond' ldvermond@...
> [regenrx] <regenrx@yahoogroups.com> wrote:
>
>>
>>
>> Hello,
>>
>> Does anyone here know the month and year this RX project appeared in
>> Short Wave Craft magazine?
>>
>> TKS, Lou
>> VE3AWA
>>
>>
>

28327. Re: [regenrx] Short Wave Craft article

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-30 17:59:16 UTC
From: Brian Ford
Topic: 28320 Message: 28327

blockquote, div.yahoo_quoted { margin-left: 0 !important; border-left:1px #715FFA solid !important; padding-left:1ex !important; background-color:white !important; } I will be well entertained with these, only with more modern tubes!
Thanks Keith

Sent from Yahoo Mail for iPad

On Friday, June 30, 2017, 12:34, Baruch Atta baruchatta@... [regenrx] <regenrx@yahoogroups.com> wrote:

If you liked that one, here is Another good one.
(this one is a little better resolution - clearer text and photos)http://www.rsp-italy.it/Electronics/Books/_contents/radio/How%20to%20Make%20the%20Most%20Popular%20all%20Wave%20Receivers%20-%20Gernsback%201935.pdf

On Fri, Jun 30, 2017 at 8:34 AM, Baruch Atta baruchatta@... [regenrx] <regenrx@yahoogroups.com> wrote:

http://www.radioboatanchor. com/blog/building-a-doerle- two-tube-shortwave-receiver

http://www.antiqueradios.com/ archives/Doerle4SW.pdf

On Thu, Jun 29, 2017 at 6:54 PM, 'Louis Vermond' ldvermond@... [regenrx] <regenrx@yahoogroups.com> wrote:

Hello, Does anyone here know the month and year this RX project appeared in Short Wave Craft magazine? TKS, LouVE3AWA

28328. Re: [regenrx] Short Wave Craft article

Yahoo group: regenrx (2016 — 2017)
Date: 2017-06-30 19:55:54 UTC
From: Jordan Dobrikin
Topic: 28320 Message: 28328

Hi
This might be considered heresy but..... :;as anyone considered
transistor-izing some of these Golden Oldies?
73 de Jordan ve7jjd

Hi

Thanx
73 de Jordan ve7jjd

On Fri, Jun 30, 2017 at 10:59 AM, Brian Ford kf4tap@yahoo.com [regenrx] <
regenrx@yahoogroups.com> wrote:

>
>
> I will be well entertained with these, only with more modern tubes!
>
> Thanks Keith
>
>
> Sent from Yahoo Mail for iPad <https://yho.com/footer0>
>
> On Friday, June 30, 2017, 12:34, Baruch Atta baruchatta@...
> [regenrx] <regenrx@yahoogroups.com> wrote:
>
>
>
>
> If you liked that one, here is Another good one.
>
> (this one is a little better resolution - clearer text and photos)
> http://www.rsp-italy.it/Electronics/Books/_contents/
> radio/How%20to%20Make%20the%20Most%20Popular%20all%20Wave%
> 20Receivers%20-%20Gernsback%201935.pdf
>
> On Fri, Jun 30, 2017 at 8:34 AM, Baruch Atta baruchatta@...
> [regenrx] <regenrx@yahoogroups.com> wrote:
>
>
>
>
> http://www.radioboatanchor. com/blog/building-a-doerle-
> two-tube-shortwave-receiver
> <http://www.radioboatanchor.com/blog/building-a-doerle-two-tube-shortwave-receiver>
>
> http://www.antiqueradios.com/ archives/Doerle4SW.pdf
> <http://www.antiqueradios.com/archives/Doerle4SW.pdf>
>

> On Thu, Jun 29, 2017 at 6:54 PM, 'Louis Vermond' ldvermond@...
> [regenrx] <regenrx@...m> wrote:
>
>
>
> Hello,
>
> Does anyone here know the month and year this RX project appeared in Short
> Wave Craft magazine?
>
> TKS, Lou
> VE3AWA
>
>
>
>

28329. Short Wave Craft Article

Yahoo group: regenrx (2016 — 2017)
Date: 2017-07-01 09:16:56 UTC
From: Louis Vermond
Topic: 28329 Message: 28329
Attachments: 3 described; binary payloads are missing from this source WARC

Thank you all for the info and comments. Hue, I'll look thru SWC as you suggest.

From the Nothing New Under the Sun Dept., here is another somewhat like RX.

73, Lou VE3AWA

28330. Re: Short Wave Craft Article

Yahoo group: regenrx (2016 — 2017)
Date: 2017-07-01 09:22:52 UTC
From: Louis Vermond
Topic: 28329 Message: 28330
Attachments: 1 described; binary payloads are missing from this source WARC

This page did not get thru on the first go...

28331. Autodyne Receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2017-07-03 03:07:03 UTC
From: w9ac@...
Topic: 28331 Message: 28331

I recently picked up a nice regen receiver on eBay that's based on Grammer's ca. 1933 autodyne circuit. I did not expect it to be a functioning receiver. My intent was to cannibalize it for parts -- until I plugged it in and tried it. The receiver is mostly adapted from Grammer's 1933 article. However, a few differences:

- Tube lineup is 77-77-78. Similar to the 58-57 series type but with 6V filaments;
- Interesting use of the 78 as the audio output tube rather than a 76 triode;
- No B+ wrapped around the skull; a UTC transformer is inserted in the 78 plate lead with a 600-ohm secondary;
- RF/Detector tuning is ganged just like Grammer's autodyne and the National SW-3;
- National SLF 270 deg. cap used as in the SW-3. National Type B Velvet Vernier dial;
- A shield plate is inserted between the RF and detector cap sections. A James Millen "no-no," but not sure why it didn't work for him. Isolation seems excellent but perhaps not on the upper bands;
- Detector coil band-spreaded much like the SW-3. 40m range is 7000 kHz to 7250 kHz across 270 degs;
- External supply uses an OD3 VR. No tuning changes with line voltage.

The RF gain circuit replicates Grammer's autodyne and uses the same component values. No hum, no howl, no buzz, and no perceptible drift on 40m after 5 min warm up. The regen control is very smooth.

The receiver appears to have been built in the 1950s. The builder used many period-correct components, but not all. Component placement is well-thought. Many components come to a single-point-ground and underside wiring is tightly laced.

Overall performance is at least as good as my National SW-3. Of course, having the B+ and screens regulated really helps with small changes in line voltage. Still amazing how well these receivers worked when construction practice matches a good schematic design.

For those curious, see eBay item number is 352053894601.

Paul, W9AC

28332. RE: [regenrx] Autodyne Receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2017-07-03 05:15:01 UTC
From: Hubert Miller
Topic: 28331 Message: 28332

That item number did not seem to work for me. How was the listing titled?
I also have a "Rationalized Autodyne" from the Grammer article.
-Hue

>For those curious, see eBay item number is 352053894601.
Paul, W9AC

28333. RE: [regenrx] Autodyne Receiver

Yahoo group: regenrx (2016 — 2017)
Date: 2017-07-03 11:34:13 UTC
From: Paul Christensen
Topic: 28331 Message: 28333

Hue, try this under completed items:

VINTAGE HAM RADIO 3 TUBE RECEIVER WITH POWER SUPPLY

Paul, W9AC

From: regenrx@yahoogroups.com [mailto:regenrx@yahoogroups.com]
Sent: Monday, July 3, 2017 1:15 AM
To: regenrx@yahoogroups.com
Subject: RE: [regenrx] Autodyne Receiver

That item number did not seem to work for me. How was the listing titled?

I also have a "Rationalized Autodyne" from the Grammer article.

-Hue

>For those curious, see eBay item number is 352053894601.

Paul, W9AC

28334. Re: Short Wave Craft article

Yahoo group: regenrx (2016 — 2017)
Date: 2017-07-04 15:43:42 UTC
From: johnhutnick@...
Topic: 28320 Message: 28334

Did anyone ever find the SWC article? Maybe I missed it in some correspondence.
John Hutnick

28335. Sussex NJ Hamfest

Yahoo group: regenrx (2016 — 2017)
Date: 2017-07-10 20:14:26 UTC
From: johnhutnick@...
Topic: 28335 Message: 28335

For anyone nearby, the Sussex County Amateur Radio Club has their annual hamfest at the Sussex County NJ fairgrounds this Sunday.
http://www.scarcnj.org/hamfest.html http://www.scarcnj.org/hamfest.html

28336. A Kitchin Regen Manhattan style

Yahoo group: regenrx (2016 — 2017)
Date: 2017-07-10 20:49:47 UTC
From: Baruch Atta
Topic: 28336 Message: 28336
Attachments: 1 described; binary payloads are missing from this source WARC

And I used little pin connector things which makes it easier to swap in New parts.

28337. Re: [regenrx] A Kitchin Regen Manhattan style [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2017-07-10 21:16:54 UTC
From: Jordan Dobrikin
Topic: 28336 Message: 28337

Hi
Please give an explanation and/or Photos of Manhattan style.
73 de Jordan ve7jjd

Hi

Thanx
73 de Jordan ve7jjd

On Mon, Jul 10, 2017 at 1:49 PM, Baruch Atta baruchatta@... [regenrx]
<regenrx@yahoogroups.com> wrote:

>
>
> And I used little pin connector things which makes it easier to swap in
> New parts.
>
>
>

28338. Re: [regenrx] A Kitchin Regen Manhattan style [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2017-07-10 22:07:07 UTC
From: Rob
Topic: 28336 Message: 28338

What frequencies does it hear?

On 07/10/2017 04:49 PM, Baruch Atta baruchatta@... [regenrx] wrote:
> And I used little pin connector things which makes it easier to swap
> in New parts.
>

28339. Re: [regenrx] A Kitchin Regen Manhattan style [1 Attachment]

Yahoo group: regenrx (2016 — 2017)
Date: 2017-07-11 01:49:07 UTC
From: wb8yyy@...
Topic: 28336 Message: 28339

Manhattan style uses an unetched pc board as the base. then small pc board pads are glued down, using super glue. these are isolated from the lower ground, and parts are mounted here. except anything attached to ground go direct to the lower board. the original poster gave a picture, and many references are on the web.

Curt

28340. Re: [regenrx] A Kitchin Regen Manhattan style

Yahoo group: regenrx (2016 — 2017)
Date: 2017-07-11 19:35:34 UTC
From: Baruch Atta
Topic: 28336 Message: 28340

http://www.sdmakersguild.org/the-art-of-manhattan-style-circuit-construction/

On Mon, Jul 10, 2017 at 5:16 PM, Jordan Dobrikin jjdobrikin@...
[regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> Hi
> Please give an explanation and/or Photos of Manhattan style.
> 73 de Jordan ve7jjd
>
> Hi
>
>
>
>
> Thanx
> 73 de Jordan ve7jjd
>
> On Mon, Jul 10, 2017 at 1:49 PM, Baruch Atta baruchatta@...
> [regenrx] <regenrx@yahoogroups.com> wrote:
>
>>
>>
>> And I used little pin connector things which makes it easier to swap in
>> New parts.
>>
>>
>
>

28341. Re: [regenrx] A Kitchin Regen Manhattan style

Yahoo group: regenrx (2016 — 2017)
Date: 2017-07-11 19:40:48 UTC
From: Baruch Atta
Topic: 28336 Message: 28341

As pictured - it received 7.0 to 12.0 MHz. I did pick up some 40 meter CW signals, but the short wave broadcast stations on the 31 meter band were loud. I want to re-arrange the tuning so it tunes the 40 meter ham band only. That would mean placing a variable trimmer cap across the cap and a lower value cap in series. The main tuning cap is perhaps 20-100 pF. If I put a 100 pF cap in parallel and a 20 pF cap in series, then it would tune 100-110 pF which is what I think is needed.

What frequencies does it hear?

On Mon, Jul 10, 2017 at 6:07 PM, Rob roomberg@... [regenrx] <regenrx@yahoogroups.com> wrote:

>
>
> What frequencies does it hear?
>
>
> On 07/10/2017 04:49 PM, Baruch Atta baruchatta@... [regenrx] wrote:
>
>
> And I used little pin connector things which makes it easier to swap in
> New parts.
>
>
>
>